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OUR EDUCATIONAL NUMBER.

NEXT WEEK our annual Educational Number will be published. We have already applied to every educational institution connected with pharmacy, chemistry, dentistry, science, and veterinary surgery for particulars of the instruction given in them, and we have also asked the Secretaries of local pharmaceutical associations to supply us with the particulars of any special arrangements made by their Association for the furtherance of pharmaceutical education. Those who have not replied should do so at once.

THERE ARE MANY OF THESE BODIES who advertise the special advantages presented by them, and we would suggest that those who have not already instructed our Publisher to insert their advertisements in our Educational Number should place their orders with him by an early post. The Publisher will furnish terms and any other advice that may be necessary.

FIRMS CONNECTED WITH THE DRUG-TRADE who wish to make their products known to medical and science schools and hospitals and, generally, to professors and teachers, should not fail to have well-worded advertisements in the issue, because, in addition to the regular circulation of THE CHEMIST AND DRUGGIST, the Educational Number will be circulated to the hospitals and medical schools of the kingdom and others who are interested in the purchase of apparatus, chemicals, books, and other matters required for educational purposes. It is the opportunity of the year to get direct to these buyers.

Summary.

A PORTRAIT of the late Professor Bunsen is given on p 354.

ONYCHA brings us a series of interesting letters printed on p. 374.

A NEW POISONS BILL is in the Victorian Parliament (p. 351).

HERR VON WALDHEIM, the celebrated Austrian pharmacist, is dead (p. 354).

THE MALARIAL MOSQUITO has been found by Major Ross in Sierra Leone (p. 369).

THE A.I.C. CERTIFICATE has been granted to a number of chemists named on p. 346.

THE NEW REGULATIONS FOR THE FORMOSAN CAMPHOR-INDUSTRY are printed on p. 378.

THE CAPE PHARMACY BILL has passed through all the stages in the Lower House (p. 352).

"BEECHAM'S PILLS," which were not Beecham's pills have brought a retailer into trouble (p. 356).

MURDER has been committed in Scotland by means of laudanum—a very rare occurrence (p. 349).

DR. SQUIBB'S EXPERIMENTS with acetic acid as a menstruum are summarised in a note on p. 360.

THE NAUHEIM METHOD of treating heart-complaints and other organic disorders is described on p. 362.

THE LORD CHANCELLOR'S SPEECH on the third reading of the Companies Bill is corrected on p. 369.

THE CULTIVATION OF IPECAC. in the Straits Settlements is to spread, says a correspondent (p. 375).

THE DRUG-TRADE IS FLOURISHING, according to the report of the Inspector-General of Bankruptcy (p. 367).

A SOUTH LONDON Coroner's jurymen has used plain language in regard to the sale of poisons by oilmen (p. 347).

COMPANY-PHARMACY is further discussed, by "Xrayser" on p. 363, by ourselves on p. 364, and by correspondents on p. 375.

COLONIAL BANKRUPTCY LAW differs from that of the United Kingdom in the respects which are detailed on p. 368

OVER ONE MILLION OUNCES OF QUININE in the bark were offered at Amsterdam to-day, the bulk of which was sold (p. 379).

RADIOGRAPHY is making good progress, and it is proved that the prejudicial effects on the skin are due to the ultra-violet rays (p. 366).

A WOBTHING CHEMIST'S ASSISTANT has failed to convince a County Court Judge that a fortnight's holiday is the custom of the trade (p. 355).

THE INTERNATIONAL PHARMACOPÆIA has induced spasmodic efforts for thirty years, with little practical result. It again comes to the front (p. 365).

DOES LEMON OIL CONTAIN 7 PER CENT. OF CITRAL? In a communication printed on p. 372 it is maintained that 3 to 4 per cent. is more likely the amount.

THIS has been an average week in the Mincing Lane trade, and quinine is toppling towards a fall, ergot is going up rapidly, and menthol is also hardening (p. 379).

SOME INTERESTING FACTS regarding London Government are noted on p. 369, where also will be found a statement regarding metropolitan coroners' incomes.

TRADE WITH SWITZERLAND is not worked by British merchants as it might be. Our Consul at Berne gives figures in regard to the drug and chemical trade which show this (p. 366).

MR. J. W. ENGLAND, a Philadelphia pharmacist, finds that a tincture made with digitalis leaves previously deprived of fat is more reliable in action than the ordinary preparation (p. 360).

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

A.I.C.

The following candidates have this month passed the final examination for the associateship of the Institute of Chemistry of Great Britain and Ireland:—In Branch "A" (Mineral Chemistry).—William Smith Denham, Glasgow and West of Scotland Technical College; Ernest Robert Nind, A.C.G.I., City and Guilds of London Central Institution; John Gustaf Adolf Rhodin (for fellowship), University of Upsala, Sweden, and under Mr. J. Wilson Swan, F.R.S., F.I.C.; James Hart Smith, Assoc. R.C. Sc. Lond., Royal College of Science, London. In Branch "B" (Metallurgical Chemistry).—John Paul de Castro, B.A. (Cantab.), Cambridge University, and under Sir William Roberts-Austen, K.C.B., F.R.S.; Walter Thomas Collis, Mason University College, Birmingham. In Branch "D" (Organic Chemistry).—Robert Duncombe Abell, University College of North Wales, Bangor; William Arthur Cates, Finsbury Technical College, London; Robert Leonard Jenks, A.C.G.I., City and Guilds of London Central Institution.

After Fifty Years' Service.

On Monday, August 21, Mr. Thomas Cooper, who has completed fifty years' service with Messrs. D. & W. Gibbs (Limited), soap-manufacturers, Wapping, E., was presented at the works with a testimonial by the firm, which took the form of a handsome gold lever watch with suitable inscription. Mr. W. S. Collins, the senior managing director, in making the presentation, referred in terms of high praise to Mr. Cooper's unique record of service, and hoped that the watch would prove as good a time-keeper as he had been. Mr. Hewitt, on behalf of the employés, presented Mr. Cooper with a gold Albert chain and silver match-box. Mr. Cooper heartily thanked the givers for their kind tokens of regard, and made a happy little speech in so doing. We understand that Mr. Cooper entered Messrs. Gibbs's employment in 1849, and has been foreman of the toilet-soap department for forty years. He has seen four generations of the firm, and, as Monday's occasion proved, he is much liked in the house.

Vanilla in the Bed.

Robert Perry (40), of Wood Street, Chelsea, was charged at the Westminster Police Court on August 19 with stealing a quantity of vanilla-beans, bottles of essence, and other articles, the goods of his employers, Harrod's Stores (Limited), Brompton Road. Prisoner had gone for a holiday, and his landlady, finding a bundle of vanilla in his bed, communicated with Harrod's, who sent a private detective, in their employ, after the prisoner to bring him back. Before leaving his house the prisoner produced three other bundles of vanilla, valued at 15s. a bundle, together with several bottles containing sauce, essence, &c. He said that he was sorry, and that a drop of drink and sunstroke, which he had had twice, had brought him to a condition in which he did not know what he was doing. He was remanded.

Analysts' Reports.

Mr. M. A. Adams, the Kent County analyst, in his quarterly report, mentions that nine samples of drugs were found to be adulterated. Amongst them was a sample of olive oil which consisted entirely of cotton-seed oil; and another of spirit of nitrous ether was 74 per cent. below B.P. strength; two samples of lime-water were 80 and 50 per cent. respectively below the required standard; and a sample of liniment of camphor 34 per cent. below standard.

In his quarterly report Dr. A. Hill, the Birmingham analyst, states that of twenty samples of almond oil examined three were adulterated with peach-kernel oil. In one case, where the adulteration was to the extent of 100 per cent., the prosecution had to be withdrawn owing to a technical error in the wording of the certificate. In the two other cases, where the percentage of the foreign oil was 75 and 50 respectively, fines of 1s. and 8s. costs were imposed; but of nineteen samples of

camphorated oil one was deficient of 10 per cent. of camphor, two were prepared with a cheaper vegetable oil, but were not deficient in camphor, and three were made from mineral oil, one of them containing a very small quantity of camphor. In all the cases except the first-mentioned, heavy fines were imposed by the Court. Seven samples of milk were found to contain formic aldehyde, and one boric acid. This latter drug was also found in a large number of samples of butter, and in one sample of malt-vinegar it was present to the extent of 0.02 per cent. Dr. Hill says this is an entirely novel form of adulteration of vinegar, and illustrates the increasing risk incurred of having articles of food dosed with antiseptics.

The Jersey Pharmacy Law.

The Royal Court of Jersey, at its sitting on Saturday last, granted leave to Mr. Albert Chas. Roper to practise as a chemist and druggist in the island, he being duly qualified under the provisions of the local law.

An Advertising-fraud.

At the Hemel Hempstead Court on August 16, Walter Hutt, a respectably-dressed middle-aged man, was charged with obtaining the sum of 18s. from Mr. E. H. Flower, chemist and druggist, 86 League Square, Hemel Hempstead, by means of false pretences. The prisoner called upon Mr. Flower, as a representative of what he called "The Programme Company," and solicited an order for an advertisement on a programme which was to contain information of all the forthcoming events in the neighbourhood and be circulated throughout the district. Mr. Flower gave the prisoner an order, and paid cash to the amount named; but the programmes were never printed. There were two other charges of a similar character against the prisoner, and, a previous conviction having been proved, he was sent to prison for one month, with hard labour.

Dr. Davis's Famous Female-pills.

An inquiry has been held at Hammersmith into the circumstances attending the death of Annie Elizabeth Sparrow, of 61 Vespan Road, Shepherd's Bush, a young shop-girl, 19 years of age, whose death was alleged to have been due to taking drugs to procure abortion. The girl was convulsed for thirty-six hours after the birth of the child, and in her room was found a box of "Dr. Davis's famous female-pills." The nurse in attendance said deceased told her she had once previously taken "stuff" during pregnancy, and had got well again. Evidence was given by Mrs. Humphris, the woman in whose house deceased was staying, and a Mrs. Le Comte, a lodger, to the effect that the latter had purchased the pills for Mrs. Humphris, who had taken them merely as aperient medicine. Dr. David Arthur said he could not show definite proof that death was due to the effect of drugs taken. The pills mentioned were a patent medicine. Detective-Sergeant Knott said he saw Dr. Davis at 309 Portobello Road, and the latter told him the pills were composed of steel, aloes, and bitter apple. They did not contain pennyroyal, and were not meant to procure abortion. The Coroner remarked that there was no evidence except the girl's own statement that she had taken the pills, and the jury returned a verdict of death from natural causes.

The Effects of Drink.

Frederick Johns, a young man, was fined 2l. 8s. 6d. at Chatham on Monday for creating a disturbance in the pharmacy of Mr. Ramsden, chemist and druggist, High Street, New Brompton. The young fellow had gone into the shop when he was drunk, and asked for a pennyworth of pills for erysipelas, and would not leave when requested.

Drunk and Disorderly.

Augustus Henry Egestorff, aged 57, of Church Road, Teddington, described as a chemist, but not on the register, was charged at the Spelthorne Petty Sessions with being drunk and disorderly in Park Road, Teddington. The prisoner was outside the Bijou Theatre, drunk and shouting, and as he refused to desist he was taken into custody. He admitted the offence, and was fined 20s., which was at once paid.

A Little Talk on Poison-selling.

There was an inquest at Guy's Hospital on Monday regarding the death of an hotel *chef*, who had drunk "carbolated fluid," which he had obtained from Wm. H. Howard, an oilman in New Kent Road. When Mr. Howard got into the witness-box a juryman began to question him. This was the examination that the oilman got:—

The Juryman: Are you a chemist that you sell poisons?—Witness: No.

Are you allowed to sell poisons?—Carbolated fluid is not a poison according to the present Acts.

I know better than that. Why, half the suicides with carbolic are the result of it being sold at oilshops.

The Coroner (Mr. A. C. Langham): It is not a restricted sale at present, but fortunately the subject is at present receiving consideration.

Another Juryman: Did you ask the deceased what he wanted it for?—Witness: No.

The Juryman: Could anyone buy it?—Well, yes.

The Juryman: But is there no restriction in the sale of this deadly stuff? Many people are deceived into thinking it is not a poison because they can get it at the oilshops. (Hear, hear.)—Witness: I knew the deceased used it for disinfecting his drains.

A Juryman: If landlords were compelled to mend the drains, instead of people being allowed to get carbolic, the public would be benefited. (Hear, hear.) Would you sell this to children?—Witness: I should use my own discretion.

The Juryman: May we take it that your discretion would merely be if the person hadn't the money to pay for it or was drunk?

The Coroner: You must not say that.

The Juryman: All I say is that the sale should be stopped. I've seen children buying carbolic.

Another Juryman: I don't see why oilshops need sell poisons at all. We have chemists' shops for that purpose, and we get the stuff in a proper bottle then with a plain label. (Hear, hear.)

The Coroner: Where do you get this carbolated fluid?

Witness: I believe it is made by a firm named Smith, in the Borough.

The Coroner: What is it made from?

Witness: I believe it is a preparation from coal or gas tar.

A Juryman: It is disgraceful. This man is selling without a single question a deadly poison without the slightest knowledge as to its character.

Witness: Deceased had often bought before, and on this occasion he asked me to lend him a bottle, as he had forgotten his, and I did so.

A Juryman: And it is put in an ordinary bottle, and might look like anything on a table.

The Coroner: At the hospital the deceased said he had been drinking, and drank the poison in mistake for stout.

Witness: He was quite sober when he bought it.

A Juryman: Do you sell any other poisons in this way?

The Coroner: We cannot go into that.

The Juryman: I only wanted to test how far the witness knows the nature of the things he sells, for from my own knowledge there is as much poison in an oilshop as a chemist's, and yet the oilman sells ignorantly without restriction, while the man with the knowledge is fixed down by laws and regulations.

The Coroner: It is at present under consideration to stop this loose sale by oilshops of poisons and articles containing poisons, and confining them solely to chemists.

A Juryman: The sooner the better. (Hear, hear.)

Dr. Miller, house-surgeon at Guy's, then testified as to the death, and a juryman remarked, *à propos* of the alleged mistake, "Familiarity breeds contempt," adding that he knew if he bought carbolic at the oilshop no one would question him, but if he tried prussic acid he must go to the chemist and be questioned. It was the same with rat-poison and oxalic acid and dozens of deadly things. In summing up, the Coroner said it was to be greatly regretted that carbolic was so easily obtainable, as the number of deaths from it was very large. It was the ease with which it could be obtained at oilshops that led to its being resorted to so often, and the sooner it was placed on the proper schedule and restricted the better for the safety of the public. He quite agreed that the sale should be restricted to chemists. The jury, in returning their verdict, recommended that the sale of carbolic and other poisonous articles now sold by oilshops and grocery-stores should be restricted to chemists and drug-stores under special supervision.

A Doctor Takes Opium.

An inquest was held at Crewe on August 22 touching the death of Mr. A. L. Morgan, aged 37, surgeon, of Swansea.

Deceased, who suffered from heart-disease, left home with the intention, it was supposed, of taking a sea voyage, but instead went to Crewe, where he stayed at the London and North-Western Hotel. On Sunday evening he was found in his bedroom in a dying condition, and Dr. Lawrence, who was called in, expressed the opinion that he had been taking opium. Death took place two hours afterwards. Dr. Lawrence now said he thought deceased must have taken about $\frac{3}{4}$ oz. of opium, which was an alarming dose even for anyone used to it. There were traces of opium in a glass in the room. There were also two bottles; one had a little opium-powder left in it, the other was labelled "Prussic acid," but he could not detect any smell of that poison, nor did he think deceased had taken any of it. His opinion was that the immediate cause of death was syncope caused by opium-poisoning. The jury found that deceased had died from an overdose of opium taken by misadventure.

The Carbolic Epidemic.

The epidemic of carbolic-acid poisoning continues. August is usually a heavy month in this respect. The following are the briefest possible notes of some cases that have come to our notice this week, about which there is little unusual except that the individuals concerned found this the easiest means to shuffle off this mortal coil.

John Lamb Moorhouse, a widower, aged 42, was found lying dead on the grave of his wife on August 18. He had poisoned himself with carbolic acid, a bottle containing the liquid being close beside him. He had been low-spirited since his wife's death.

A man named John Williamson, of 7 Harrington Street, Nottingham, poisoned himself at Bulwell Forest on the evening of August 17. He was discovered lying on the ground with a bottle containing carbolic acid by his side, and was conveyed to the hospital, but medical assistance was of no avail, and he died. Deceased had occasionally collected money for the firm of clothiers where he was employed, and there was a deficiency of 4/- in his cash. He had been asked about this on the day of his death, which was found to be due to taking a mixture of carbolic acid and laudanum.

On August 21, John Edwards, ironworker (46), of Swan Village, West Bromwich, was found dead in an outhouse a the rear of his residence. He had a quarrel with his wife the previous evening, and left the house saying he would clear out. He was discovered next morning as described, with a bottle of carbolic acid near him, from which he had apparently taken a large draught.

A young woman named Alice Chard (23) was charged at the West London Police Court on August 23 with attempting to commit suicide by taking carbolic oil. She had been induced to marry an omnibus driver, whom she understood to be a bachelor. After the marriage, however, she found he was a widower with fourteen children. Shortly after the man died, and she was left with his large family thrown on her hands. Poverty caused her to attempt to destroy herself. She was remanded, the Magistrate directing that she should be conveyed to Holloway in a cab.

A Fatal Drink.

A Boozey cyclist, named Bradshaw, after a ride from Bedford on August 21, went into the pantry of his house and drank sulphuric acid in mistake for raspberry vinegar. He died a few hours later in great agony.

Science Scholarships.

A list of the awards of scholarships to be held in the Royal College of Science as a result of the May examinations of Science and Art classes has just been published. National Scholarships for chemistry, value 30s. a week and free education for three years, are awarded to John H. Crabtree, cotton-weaver, Todmorden; Howard E. Goodson, laboratory assistant, Leeds; Arthur H. Higgins, student, Bradford; and Montague W. Stevens, student, Plymouth. Free Studentships, tenable for three years, in chemistry are awarded to John R. Horsley, student, Canterbury; and Arthur C. Nicholson, student, Newark. Seven Royal Exhibitions have been awarded. These are of the annual value of 50/- and free education for three years. Six of them go to apprentice-fitters in Devonport and Portsmouth, the seventh

being awarded to Edgar Sutcliffe, student, Blackley, Manchester, a lad of 16. National and Free Scholarships are also awarded in mechanics, physics, biology, and geology. William H. Goodchild, analytical chemist, London, receives one of the two National Scholarships for geology.

Wine-licences.

Charley Dean, chemist and druggist, of Moorgate, Bury, Lancashire, has been granted a wine-licence by the Bury Magistrates.

Mr. Albert Timmins, chemist and druggist, of 68 Murray Street, West Hartlepool, and Mr. Edward Lionel Merrett, chemist and druggist, of Henfield, have been granted off-wine licences at the recent Brewster Sessions.

Drug-contract.

The Bristol Board of Guardians has entered into a contract with Messrs. Ferris & Co. for the supply of drugs to the workhouse.

A Window-smash.

One of the large plate-glass windows at the shop of the Cash Supply Stores (Limited), chemists, Halifax, has been smashed by a frightened horse backing a cart into it. Considerable damage was done, but this is covered by insurance.

What Will the Prisoners Say?

The Prison Commissioners have approved of the introduction of toothbrushes into her Majesty's prisons for the use of prisoners. The contract for the whole supply has been given to a London firm.

Explosion in an Indiarubber-factory.

Coroner Houchin held an inquest at the London Hospital on Tuesday, regarding the death of a workman, aged 20, who was killed by an explosion at the indiarubber-works of Messrs. Birnbaum & Sons (Limited), Bow. Deceased had been working at an indiarubber-curing stove, in which bisulphide of carbon and chloride of sulphur are used, when suddenly a belt came off the pulley which drove the ventilating-fan, and an explosion of gases resulted, which enveloped the poor workman in flames. He was severely burned, and died in the London Hospital. Mr. Henry Birnbaum, the managing director of the company, in the course of his evidence, stated that the fan-arrangement had been introduced by direction of the Home Office inspector. In the old system they worked in unconfined space, with open windows, and so on; and Mr. Birnbaum suggested that this fatality was a proof of the superiority of the old system. Nevertheless, the jury, in returning a verdict of accidental death, recommended certain changes in the fan-ventilator and machinery. The case is especially noticeable to chemists on account of the explosion of the mixed vapour of bisulphide of carbon and chloride of sulphur. The recent investigations by Professor Dixon, of Manchester, showed that a very high temperature is required for bisulphide-of-carbon vapour alone, and it appears that the above mixture is more sensitive.

A Deserted Assistant.

At Worship Street Police Court, on August 22, Thomas Reader (37), zinc-bender, and Jane Maria Skinner (36), married, were charged with stealing a quantity of furniture, the goods of Frederick Skinner. The prosecutor stated that he was a chemist's assistant, living at Mintern Street, Hoxton. The man Reader lived at Clarence Road, Walthamstow. On July 21 witness, who had been eighteen years in one situation, went home at 12 o'clock in the usual way to give his wife his money, and left again at 1 o'clock, his wife then being somewhat flurried, which she explained on the ground of the heat. At 4 o'clock, when he returned, he discovered his wife was not at home, and on looking round he missed a mangle and wringer, a carpet, a cheffonier, pictures, chairs, &c. He then heard from a neighbour that his wife had been carrying on with the man Reader, and had gone away with him. He put the matter in the hands of the police, and on August 21 went with two officers to Walthamstow, where at one house he saw his wife, his furniture, and the male prisoner. Reader at the station said that the woman told him the goods were hers, and he had not helped to take them away. Mrs. Skinner proceeded to cross-examine her hus-

band, her questions being directed to show that she had bought the articles which were the subject of the charge. The husband denied that his wife bought the goods. Mr. Corser said that evidence connecting Reader with the stealing or receiving must be obtained, and granted a remand, and allowed bail. No bail was forthcoming, and the prisoners were removed, being told that bail in 10*l.* would be accepted for each.

The late Sir E. Frankland.

The funeral of Sir Edward Frankland took place at Reigate on Tuesday. The body was encased in a large coffin of Norwegian timber, coloured black, with white mounts, in which it had been borne from Golaa, in Gudbrandsdal, where Sir Edward died on August 9. The native style of the Norsk folk in the cases for their dead was perhaps quite as impressive as the more highly-polished caskets used in England. The usual medallion recorded the name and honours of the deceased as K.C.B., J.P., D.C.L., LL.D., and Foreign Secretary to the Royal Society. He was born on January 18, 1825, and was therefore 74 years of age. There were present, in addition to the immediate relatives, Sir Frederick Bramwell, Lord Lister, Sir Henry Roscoe, Sir Myles Fenton, Sir Michael Foster, Dr. Ludwig Mond, Dr. T. E. Thorpe, Dr. Armstrong, Professor Dunstan, Professor McLeod, Dr. Clowes, and Mr. Pilcher (representing the scientific societies). The body was brought to England from Norway on Monday. The funeral procession was formed at The Yews, Reigate Hill, the residence of the deceased, and at the Reigate parish church the Rev. Professor Bonney, F.R.S., conducted the service. Many wreaths adorned the coffin, including one from Mr. and Mrs. J. Wilson Swan, one from the Fellows of the Institute of Chemistry and one from the Chemical Society.

Wanted—an Owner.

At the Southwark Police Court Henry Bacon (72), dealer Holmes Terrace, Waterloo Road, was charged with being in unlawful possession of two pairs of elaborate surgical corsets. Prisoner was stopped in York Road, coming from the direction of Hungerford Bridge with a large parcel. When asked by the constable what it contained, he said, "Oh, you know. I picked it up on Hungerford Bridge, and am taking it home." The officer opened the parcel and found the corsets, which, being submitted to a surgical-instrument maker, were declared to be worth—one ten guineas, and the other five guineas at least. Remanded; bail refused.

Guardians and Expensive Drugs.

The Local Government Board have communicated with the South Stoneham Board of Guardians relative to the supply of drugs to the workhouse, and the Board recommend that in future expensive drugs and medicines shall be paid for at the cost of the Guardians and not by the medical officer. The Clerk intimated that already the Guardians supply quinine, cod-liver oil, and trusses; and it was decided to acquaint the medical officers with the Local Government Board suggestions, and intimating that if other expensive drugs or medicines were used they would be remunerated by the Guardians.

Arsenic-works Closed.

The Devonshire Arsenic-works at Maryavy have been closed. It is said that the mine is by no means exhausted; in fact, a splendid lode was being worked when all hands (about 100) were stopped. The manager, it is said, has also received notice to relinquish his position. The closing of the works is said to be due to a dispute that exists between the shareholders and directors of the company.

Fires.

Serious damage was caused on Saturday night by a fire at 92 St. John Street, West Smithfield, at the stores of Messrs. Gedge & Co., wholesale chemists and varnish manufacturers.

At Accrington on Wednesday two school-children, playing with matches, pushed a piece of burning paper under the door of an oil-stove on premises belonging to Mr. John Law, chemist and druggist. In a moment the place was ablaze, and so fiercely did it burn that for some time it could not be approached owing to the heat, which was so intense as to crack windows at the other side of the street. The building

and its contents were reduced almost to ashes, and a paint-store adjoining was also destroyed. The property was uninsured.

Cricket.

Stevenson & Howell's C.C. v. Davy Hill's C.C.—On August 19, at Brockley, resulting in a win for the former by 7 runs. Scores: S. & H. C.C., 38; Davy Hills C.C., 31. H. A. Hordell bowled well for the winners, taking 8 wickets for 18 runs.

For Not Wearing the Face-guard.

At the Newport Police Court on Wednesday, a youth named Samuel Miles, employed at the aerated-water works of Mr. W. H. Vile, in Alma Street, was fined 5s. for not having used the face-guard as stipulated by the special rules made by the Home Secretary. Defendant said he did not wear the guard because his head ached, and the weather was so hot. Mr. Augustus Lewis, Factory Inspector, did not press the case as it was the first of the kind which had been brought before the Court, but he said bottling was the most dangerous portion of the work in such a factory. He had at present four cases of serious accident to bottlers to investigate in the district.

To Save the Boat.

A boy named F. Maxey, son of Mr. Maxey, chemist and druggist, of High Street, Wisbeach, early on August 19 found a boat, the property of his father, nearly filled with water. In this condition Maxey was endeavouring to take the boat towards the sluice, and when near the bridge he collided with a post, causing more water to enter the boat. He had to jump into the river to save the boat from going under with him. Maxey being able to swim, succeeded in reaching some lighters in the river, and the boat was afterwards secured.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The Shamrock and the King's Evil.

Mr. John Knott, M.R.I.A., a Dublin gentleman, has drawn public attention to a herbalist's cure for the king's evil, and states that he obtained the specific from a herb-doctor in Roscommon. The cure chiefly consists of a preparation of the leaves of the cuckoo sorrel—the original Irish shamrock.

L.G.B. Inquiry as to Drugs.

Dr. Clibborn, medical inspector to the Local Government Board, is to hold an inquiry this week at Ballyshannon regarding the statements made by Dr. Crumley, Kinlongh, to the effect that there were discrepancies between the quantities of certain drugs recently ordered and the quantities supplied by the contractor to the Board of Guardians (Mr. Boyers, of Sligo), and that excessive charges for particular articles were made in the invoice.

The Sale of Laudanum in Belfast.

At the Belfast Police Court Samuel McGahy, a butcher, was charged last week with attempting to poison himself by drinking, when in a state of intoxication, two small bottles of laudanum. McGahy was conveyed to the Royal Hospital, and after great efforts his life was preserved. We mention the case because the Magistrate, in remanding the prisoner, said that chemists or druggists should not sell laudanum to a man in such a state. It happened, however, that McGahy was not drunk when he purchased the drug.

On the same day an inquest was held as to the death of Margaret Sinclair from laudanum-poisoning. The jury found that death was due to laudanum-poisoning, and added a rider requesting that some restriction should be made on the sale of laudanum, as in the case of strychnine.

Turpentine-liniment.

At the meeting of the Boyle Board of Guardians, held on August 12, the Local Government Board advised the

Guardians to return certain liniment of turpentine supplied by Messrs. Leslie & Co., and to procure a supply in lieu thereof at the contractors' expense. It appears that the drug-analyst had reported adversely on the liniment. Some conversation took place in regard to the matter, and a remark was made that the Guardians thought that the Local Government Board should have ordered Messrs. Leslie & Co. to be prosecuted.

Drug-analysing.

Sir Charles A. Cameron has offered to act as drug-analyst for the Boyle Union at a salary of 1*l*. a year, and a fee of 2*s*. 6*d*. per sample in excess of twenty-four. His liberal offer to the Boyle Guardians did not, however, appear to have been met by them with gratitude. They treated it as a claim for extra salary, and referred the matter to the Ross County Council, with the suggestion that Sir Charles's salary as county analyst should include all his work for the Union and District Council.

A Day's Outing.

Last week, at Dublin, the employees of Messrs. Williams & Co. (Limited), druggists, &c., held their first annual excursion at the Glen of the Downs. The party, numbering close on one hundred, left the city at 10 A.M. in drags, and arrived at their destination about 3 P.M., and spent an enjoyable day. Mr. J. Rickerby, the manager, organised the excursion.

Contracts.

At a meeting of the Mullingar Board of Guardians six tenders for the supply of medicines were received. The drug-contract was given to the Cork Chemical Company, and that for the supply of medical and surgical appliances was given to Messrs. Smith & Sheppard, Dublin, at 50 and 44 per cent. respectively off the official list.

Horses and Physic.

The Irish National Horse Show opened at Ball's Bridge, Dublin, on Tuesday last, and as usual there is an exhibition in connection with it, amongst the drug-trade exhibitors being Aerators, Bovril, Day, Son & Hewitt, and Jeyes' Sanitary Compounds, London, and H. M. Leask & Co., Dublin. Local chemists are well to the front, and good sales are reported.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

"Potash and other Acids."

The *Scotsman* is in need of a little scientific help on its editorial staff. It recorded last Saturday that two young lads in Lochee had been severely burnt by falling into a tank containing a wood-stain consisting of bicarbonate of potash and other acids. As the accident happened in a chair-factory, we presume that the tank really contained a solution of bichromate of potash and sulphuric acid. We notice in the Dundee papers that it was bichromate "and other acids."

Carbolic-acid Poisoning.

John Sturrock, labourer, of Commercial Street, Maxwellton, on August 17 visited the shop tenanted by his daughter in the same street, and took a drink out of a bottle which was standing on the mantelshelf. He soon afterwards became ill, and it was found that he had partaken of a quantity of carbolic acid. Dr. McVicar did what he could to relieve Sturrock, who was suffering great pain, but he gradually became worse and died. It is believed that the unfortunate man thought the bottle contained liquor of a harmless character.

Murder and Suicide with Laudanum.

On August 19, at Gilmerton, a small mining village about four miles from Edinburgh, a widow named Mrs. Milligan, employed under the Lunacy Board to look after a homeless

imbecile and an old woman named Mrs. Shaw, poisoned herself and the two unfortunate people in her care with opium. When the neighbours found them Mrs. Milligan and a German, who was known only by the name of "Alec," were already dead, but Mrs. Shaw lingered a few hours unconscious, dying after the arrival of Dr. Peebles, of Liberton, who was of opinion that death was due to opium-poisoning. On the previous day Mrs. Milligan went to Edinburgh, returning the same afternoon, and the supposition is that she was entrusted by the chemist or chemists with a sufficiently large quantity of laudanum for the purpose she had in view by the fact that she had hitherto dealt largely in medicines, and that she was known to be a caretaker under the Lunacy Board. It is stated that when she went in for a day's drinking she relieved herself of all bother about her patients by giving them an opiate, sending them to sleep for the day. Not very long ago she threatened to commit suicide. Sir Henry Littlejohn has not yet completed his *post-mortem* examination of the bodies of the victims, but so far as it has proceeded it goes to show that death was due to opium-poisoning.

French News.

(From our Paris Correspondent.)

CONVENT-PHARMACIES.—The Pharmacists' Syndicate of Morbihan has prosecuted the Mothers Superior of two convents for illegal practice of pharmacy. Both cases were heard recently at Lorient. Judgment was given against the defendants, and an order given to close the convent-pharmacies.

DEATH BY DROWNING.—Etretat, the popu'ar seaside resort on the Normandy coast, was the scene of a tragic death by drowning last week, the victim being Mr. Edward Ray Thompson, who is a brother of a member of the firm of Messrs. John L. Thompson & Sons, wholesale druggists, of Troy, N.Y. Mr. Thompson swam a long way from the beach while bathing, and drifting out of the reach of immediate help disappeared before a boat could reach him. The body has been recovered, and is to be embalmed and sent to the United States.

ME. LABORI'S SURGEONS are at loggerheads. Dr. Reclus, who was called in after the attack on Dreyfus's eminent counsel, has been criticised in the newspapers by Dr. Doyen, who is, like Reclus, a friend of Labori's, and went to Rennes when he heard of the attempted assassination. Doyen insinuated that Reclus is an old fogey, while the latter calls his colleague a young enthusiast for the scalpel and a seeker after notoriety. They have several other points on which they differ, one of which is the question of radiography. Labori has sided with Reclus in the dispute.

ILLEGAL PHARMACY.—A Paris coiffeur has been summoned by the Syndicate of Pharmacists of the Seine for selling a hair-restorer containing substances of which the sale is reserved to pharmacists. He was fined 50f., but escaped under the First Offenders Act. A considerable trade in preparations for the hair is carried on in France by several English, American, and other firms, and they do not appear to be out of harmony with the pharmaceutical authorities; though it may strike a foreigner somewhat curiously, perhaps, that they cannot as a rule get their specialities stocked by pharmacists here.

OUTDOOR RELIEF AND PHARMACISTS.—The Syndicate of Pharmacists of Brive had reason to complain that in certain localities the patients who had obtained free consultations and prescriptions from the medical officer of the public dispensary were instructed to go to a certain pharmacy to have the medicine dispensed. The matter was put right by an interchange of letters between the Syndicate and the local prefect, the latter instructing the mayors in his district to see that the outdoor-relief patients had a free choice in the matter of a pharmacy. The prescriptions thus dispensed are paid for by a special tariff, and, though there are frequent complaints on the part of French pharmacists that this tariff is too low, they evidently take care all the same to see that the business does not escape them.

MUTUAL-HELP SOCIETIES' PHARMACIES.—The Civil Tribunal of Marseilles has given judgment in an action brought by the local Pharmacists' Syndicate against the Mtnal-help Societies of the town, the point at issue being whether the latter had the right to have private pharmacies of their own managed by a qualified pharmacist. A decision was given in favour of the defendant Societies, and it was further stipulated that the families of members of Mutual-help Societies have the right to purchase drugs and medicines in the Societies' pharmacies without the latter losing their private character. Litigation on the point in question has been going on for a long time, and the pharmacists are not disposed to accept this decision.

THE ANTI-PLAQUE SERUM is, by a recent official decree, now authorised to be prepared by the Pasteur Institute, Paris, and can be sold or distributed gratis. This decree has been issued as a result of the recent outbreak of the pest in Portugal. Dr. Metchnikoff, head of the bacteriological research laboratory at the Pasteur Institute, expresses the opinion that with the present scientific knowledge of the bubonic plague and the use of the anti-pest serum a serious outbreak is not to be feared in Europe. The Quarantine Service on the French and Spanish frontiers from Portugal is already very severe, and a courier in the Russian Diplomatic Service explained to me last Monday that he had undergone considerable inconvenience and delay in reaching Paris, where he had just arrived from Lisbon.

LES PHARMACIENNES.—Mention was made in a recent issue of the *C. & D.* that the first pharmacy in Paris owned and managed by a lady had been opened by Mlle. Fichtenholz at Passy. She has just found an emplator in Mlle. E. Maitre, a French lady holding the diploma of the Paris School of Pharmacy, who has recently commenced business in the Boulevard Montparnasse, in the Latin Quarter, where she appears to be doing well. There is still another lady-pharmacist in Paris—Mlle L. Napias by name—who appears to be only awaiting an opportunity to establish herself in business. The lady-dentist appears also likely to become a feature of Paris. Several are practising here. They find their *clientèle* principally amongst ladies and children. One of them—Mlle. Francois, who speaks English—has her consulting-rooms in the rue St. Honoré, Paris.

A TEMPTING INVESTMENT.—A pharmacien of St. Denis, near Paris, named Champigny, has recently secured some notoriety by a circular which has been profusely distributed in France under his name. It sets forth that a French syndicate has been constituted to issue shares of the Société Européenne with the object of exploiting specialities called Champigny's ferrotine and Champigny's cod-liver oil. The syndicate offers to dispose of 500 shares of 200f. each, evidently meant as founders' shares, with the promise that (1) the sum paid will be reimbursed on the definite formation of the Société Européenne on October 1 next; (2) a commission of 10 per cent. on the sum paid; (3) a profit in fully-paid shares of the Société, or cash, equal to the amount originally invested. The names of a committee of patronage are given, including three doctors and three pharmacists. Among the latter is the name of M. Villejean, chief pharmacien of the Hôtel Dieu Hospital, Paris, but as he disclaims all knowledge of the affair and protests against the use of his name further comment is unnecessary.

ANTI-CUTTING.—M. J. Simon, of Paris and Lyons, a well-known maker of toilet-preparations, has recently inaugurated a system for protecting the prices of his specialities. The arrangement strikes me as being very much in line with the system introduced by the proprietors of "Cherry Blossom," as set forth in the inset which appeared in the Winter issue of the *C. & D.*, except that the Paris firm does not offer inducements to "special agents." In his circular in which the scheme is set forth M. Simon explains that he has received numerous solicitations from his customers, and in view of the general movement that is taking place in favour of raising retail prices, he has made the sacrifice of reducing the wholesale prices, and while on his side he is determined to neglect nothing that will make the "reform" a success, he does not hide the fact that complete success depends above all on the "perseverance and discipline" of the retailers themselves. In future no goods will be supplied by

M. Simon to retailers direct unless they have signed an agreement not to sell below the fixed prices. He has also arranged with the leading wholesale houses only to supply adherents to the scheme. The principal phrase in the anti-cutting agreement for signature by the retailer reads, "I will keep integrally for myself as a special discount the difference between the minimum prices and the net prices mentioned on my invoice." The scale of prices secures profits to retailers varying from 20 to 30 per cent.

Australasian News.

Chiefly from "The Chemist and Druggist of Australasia" for July, 1899, of which copies may be obtained from the Publisher, 42 Cannon Street, E.C., at 6d. each.

LOCAL INSPECTORS.—The Pharmacy Board of New South Wales are about to appoint inspectors to report infringements of the Pharmacy Act. They are getting the assistance of the local chemists in the selection of men for this purpose, a method which the mother-country might adopt.

B.P. IN TASMANIA.—At the last meeting of the Pharmaceutical Society of Tasmania it was decided to wait on the Premier and ask him to cause the necessary *Gazette* notice to appear, making the B.P. 1898 official. The Court of Medical Examiners are unwilling to take action, as they say hitherto the various editions of the B.P. have come into operation gradually without interference.

AN INDECENT PUBLICATIONS BILL was introduced into the Victorian Parliament on June 28, and had very sympathetic treatment. It proposes to prohibit advertisements referring to syphilis, gonorrhœa, nervous debility, or other complaint or infirmity arising from or relating to sexual intercourse or sexual abuse, or to pregnancy, or to any irregularity or obstruction of the female system, or to the treatment of any complaint or condition peculiar to females.

BENZINE AT THE BALL.—The daughter of a Sydney (N.S.W.) chemist tells of the advice received from another lady visitor at the chemists' ball recently held there. The subject under discussion was the renovation of white kid gloves, and each agreed that benzine was the correct thing. "But don't go to the chemist's, my dear," volunteered the visitor; "get it from the ironmonger; he'll give you ten times as much as the chemist for sixpence." "Then there was a blank," says the chemist's daughter, "which I filled by thinking what she would have done had I told her that pa was in the line."

NEW POISONS ACT FOR VICTORIA.—A Bill to amend the Poisons Act was introduced into the Legislative Council of the colony by the Government in the last week of June. It exempts from the original Act doctors' prescriptions containing poisons, certain homeopathic medicines, patent medicines, photographic materials, cyanide of potassium (in 56 lb. parcels and upwards), veterinary medicines, poisoned seed and mixtures for vermin, fly-papers and wholesale dealings; but a record of sales must be kept, and special bottles and wrappers used. Certain poisons materials may not be sold to a person under 18 years of age, unless under certain conditions. The *Melbourne Age*, referring to the new Bill, says: "This monument of legislative sagacity, while providing all sorts of restrictions and precautions against the purchase of sixpennyworth of laudanum to cure a toothache, allows, it appears, the free and unrestricted sale of cyanide of potassium—which contains only 33 per cent. of prussic acid, the most deadly and instantaneous poison known—because it is used in photographic processes."

MR. BLACKETT ON PRESCRIBING.—Mr. Blackett, the Government analyst for Victoria, and one of the leading pharmacists of the colony, was the principal witness at an inquiry at Melbourne regarding the mysterious death of a circus acrobat. Mr. Robert Beddome, a chemist, deposed to dispensing some medicine for the deceased, who had explained his symptoms to him. Mr. Beddome recommended deceased to go to a doctor, but the acrobat preferred the chemist to prescribe for him. Mr. Blackett, previous to Mr.

Beddome's evidence, had testified analysing the contents of the acrobat's stomach, and finding bismuth as the only foreign matter in it. After Mr. Beddome's evidence he was called again, and he told the coroner that prescribing was contrary to the spirit of the Pharmacy Act, which simply contemplated that they should sell drugs and dispense medicines. This rather free interpretation of the Pharmacy Act does not appear to have been commented upon, and the medical evidence exonerated the chemist, Mr. Beddome, from all blame as to the death, Drs. Grant and Spring showing that deceased had suffered from a number of complaints which were not aggravated by the administration of the bismuth mixture.

THE OTAGO PHARMACEUTICAL ASSOCIATION sent a deputation to the Premier at Dunedin on June 7, to lay before him some of their grievances. One was the exemption of chemists from the compulsory early closing in the amended Shop-hours Act, which the chemists say is not necessary and was not done at their request. The deputation also asked that the Sale of Poisons Act should be embodied in the Pharmacy Act, and placed under the control of the Pharmacy Board. At present, a purchaser of strychnine or arsenic is required to make a declaration before a justice of the peace, and the declaration has to be stamped with a half-a-crown stamp. Customers cannot be got to comply with the regulation, and this leads to the sale of arsenic and strychnine *sub rosa*, a very objectionable practice. The Premier said he was afraid to touch the Shop-hours Act, as it would lead to attempts to introduce other matters in the Act. He would look into the regulations for the sale of poisons, which he thought had been misinterpreted. In regard to a request that chemists be exempt from jury-service, the Premier said there was so much intelligence among chemists that it would be a loss to the colony if their services were barred.

RECIPROCITY.—The desirability of establishing a system by which a pharmacist registered and allowed to practise his profession in one colony should be equally privileged throughout the whole of Australasia is again to the fore. The chief difficulty arises from the fact that the registers include both examined men and those who were registered on the strength of being in the business before the various Acts were passed. If reciprocity were granted only to those who had passed the examinations, it is obvious that the veterans who secured the passing of the Pharmacy Acts would be excluded. On the other hand, it is felt that it would be impossible to recognise everyone on the register—for instance, the N.S.W. Pharmacy Act granted registration to every apprentice who had been in the business for twelve months. To get over these difficulties it is suggested that a certain period of years in business as a pharmacist should be equivalent to passing an examination, or that a modified examination be imposed.—It was pointed out at the meeting of the Pharmacy Board of New South Wales that Great Britain had not the power to reciprocate with any other country, and that their promise to remedy the matter in future legislation was evidently not sincere, as the recent Pharmacy Act Amendment Act did not refer to the matter at all.—Sir Hugh Nelson has written to the Pharmacy Board of Queensland, regretting that, owing to his many engagements when in England, he was unable to bring the reciprocity-claims under the notice of the British authorities.—Mr. H. A. Rose and Mr. G. S. C. Wells, of the Registered Pharmacists' Society of N.S.W., who are candidates for election on the Pharmacy Board, are making reciprocity an election-question.—The C.D.A. has collected together in its July number the various suggestions which have been made on the subject and the opinions of law-authorities and pharmacists throughout Australasia. It is a coming imperial subject, and the feeling is growing that the home societies should do something to urge the matter on.

THE VALUE OF MINERAL WATERS IMPORTED into Cape Colony during the first three months of this year is estimated at 1,7907. This includes natural waters which come in free of duty.

SPIRITUS SAPONUS KALINUS is recommended by some authorities as a disinfectant wash for surgeons' hands. A simple way to prevent the slipperiness produced is to put two or three drops of dilute muriatic acid on the wet hands after use and rub it well in.

South African News.

(From our Correspondents.)

THE ANTIKAMMIA CHEMICAL COMPANY, St. Louis, U.S.A., notify in the *Cape Gazette* that they will apply for registration of their trade-mark on September 4.

PERSONAL.—Mr. Rudolph Demuth, representative in South Africa for the Formalin Hygienic Company (Limited), and manufacturer of various antiseptic preparations, is back again in Cape Town after having done his usual European annual tour.—Mr. Arthur Daniel Benssan, M.R.C.S., L.R.C.P., has been licensed to practise medicine in the Cape Colony.

CAPE PHARMACY BILL.—The second reading of the Medical and Pharmacy Act Amendment Bill was taken in the House of Assembly on July 26. Mr. Schreiner moved the reading, and expressed his surprise that, although the Bill had been approved by successive Governments and the Medical Council and Pharmacy Board, it contained a great deal of contentious matter. He then went over the clauses one by one, and stated that he would have no objection to acceding to the druggists' request to have the words "*bona fide*" substituted for "constant" in Clause 8, so that it would read, "Every shop shall be conducted under the *bona fide* and personal supervision of some registered chemist and druggist." He would expunge Clause 9, dealing with medical treatment by chemists, as this matter was already dealt with in the existing Act. It was his intention, when the Bill reached the committee stage, to suggest the alteration of Clause 10 (midwives clause) so as to secure some control over puerperal-fever cases, but he hoped that the alteration would be such as would make the clause less stringent in its effect upon midwives in country districts. Mr. Schreiner also referred to the proposals in regard to Dutch medicines and the patent-medicine clause, but there was nothing in his remarks to indicate that any alteration would be made in the proposals contained in the Bill, except that he wished Dutch medicines containing poisons to be treated exactly like patent medicines. He also referred to the dentists clause, and stated that provision would be made to enable dentists to have assistants not necessarily registered dentists. Following Mr. Schreiner several members spoke, Captain Brabant and Mr. Tamplin advocating the alteration of Clause 16—that is, the patent-medicine clause—the latter gentleman supporting the inclusion of Dutch medicines in this category. In the course of his remarks, Captain Brabant paid a high compliment to chemists and druggists, to whom the public were much indebted. Some of the provisions of the Bill might be applicable to a crowded population, but not in this country. Druggists should be allowed to prescribe in cases, but no mention was made of this in the Bill. Mr. Tamplin was sarcastic about Dutch medicines. They ought to be included under patent and proprietary medicines, he said. They came from Holland or Batavia, and he supposed they were chiefly soporifics—something to keep the children quiet. Dr. Beck (who made a maiden speech) condemned the idea that the Bill was a doctors' Bill and that its object was to make war with the chemists. He had always regarded chemists as among his best friends, and said he would be the first to support a very much larger measure of protection to chemists than they now had. Another speaker (Mr. van Wyk) said he was opposed to having restrictions placed upon apothecaries, for although he knew of doctors who would kill people, he knew of no apothecary who had done that. The apothecary was the poor man's doctor and was an absolute necessity. If he were an apothecary, he would sooner migrate to the Transvaal than remain in the colony after the Bill was become law. Mr. van Heerden, speaking on the patent-medicine clause, expressed the opinion that the penalty should fall upon the manufacturer, and not upon the seller of the article. Most of the gentlemen who spoke against the Bill were acting on behalf of the chemists of the colony, and they spoke up well. The debate lasted two hours.—On August 1 the House went into committee on the Bill, when Mr. Schreiner submitted amendments of Clauses 6, 7, and 13, dealing with medical and dental matters. The amendments were passed, and the Bill was reported to the House without further alteration.

Colonial and Foreign News.

BULGARIAN TARIFF-CHANGES.—The Bulgarian Ministry has resolved, in order to encourage home industries concerned therewith, to permit the importation of the following duty-free (this order holds good until further notice):—Acetic acid, benzine, alum, glycerin, sulphate of iron, carbonate of potash, antimonial salts, and castor oil. In our issue of December 24 1898, page 1,022, we gave a list of drugs and chemicals which are allowed to enter Bulgaria free of duty.

TOOTHPHBRUSHES FOR GERMAN SOLDIERS—A German military doctor declares that in his regiment a thousand men have among them 4,859 decayed teeth. Only 164 men were found with their teeth intact. The use of the toothbrush is one of the duties of every German soldier, but, as this officer maintains, the toothbrush is employed for any purpose except to keep the teeth clean. He therefore insists that non-coms. shall see that the toothbrushes are used for their proper purpose.

IMITATING PEARS' SOAP.—The cases instituted by Messrs. A. & F. Pears against three native shopkeepers for selling in Colombo spurious imitations of Pears' soap have been amicably settled. Interim injunctions had been given restraining the defendants from selling the soaps, and claiming 5,000r. as damages. Now, however, the plaintiffs have agreed to waive the question of damages, as defendants have consented to the injunction being made perpetual and to pay 402 38r. in each case to cover the costs incurred.

PARAGUAYAN IMPORTS—Among the imports into Paraguay during 1898 were:—Perfumery, toilet-articles, &c., £21,479; drugs, &c., £13,911; "special drugs and medicines," £4,633; drug-apparatus, &c., £16,355 (1 gold dollar = 4s. 1d.). The perfume consisted of eau de Cologne (in bottles of 10 c.c. each), 1,013 litres; fine extracts (in 5-c.c. bottles), 303 litres; ordinary scented soap, 7,996 kilos.; and face-powder, 3,039 kilos. Formerly large quantities of Florida water were imported from the United States, but now it comes principally from Germany.

NEW SOURCE OF GUTTAPERCHA.—M. Jouffroy d'Albans the French Consul at Singapore, writes to the *Courrier de Saigon* regarding an invention made by a Frenchman in the Straits to extract guttapercha, principally from the leaves of *Isonandra Hookeria*. The leaves, dried, are sent to Belgium and France for the extraction of the gutta. This trade in dry guttapercha-leaves has considerably increased at Singapore and Penang. The gutta thus produced is said to be of such high quality that the Eastern Extension Cable Company has contracted with the inventor for a supply of it.

WOMEN DOCTORS.—Modern women doctors cannot claim to be without precedent, for as far back as 300 years before the Christian era an Athenian of the name of Agnodice is said to have practised as a doctor. Before the fifteenth century a number of women obtained doctors' diplomas at the Moorish universities. In the eleventh century Tortula von Ruggiera, of European renown, practised in Salerno. At the beginning of the fourteenth century Dorothea Bocchi not only received the doctor's diploma at the Bologna University, but also the degree of professor. In more recent times we find two women taking degrees at the same university—Anna Mangalini in anatomy, and Maria della Doune in midwifery.

SEVENTY-HOURS LAW.—The Pharmaceutical Clerks' Association of Greater New York had a small, but stormy, meeting on August 2. The draft Shorter-hours Bill which the Association is promoting was presented for revision and suggestion. This seeks to limit the hours of drug-clerks to seventy hours per week. Six hours' overtime may be done in one week, for the purpose of making a shorter succeeding week, but the aggregate number of hours in any two such weeks shall not exceed 140. The sleeping-accommodation provided at drug-stores must comply with the sanitary regulations of the local Board of Health. Copies of the draft have been sent to the chief pharmaceutical societies in N.Y. State, with a request that the societies will use their best endeavours to carry out the provisions of the proposed law as nearly as possible.

RUSSIAN WEIGHTS AND MEASURES.—A Reuter telegram from St. Petersburg last Friday, August 18, states that the new regulation in regard to weights and measures was officially published that day. The Russian pound is fixed as the standard of weight and declared to be equal to 409.512 grammes, a pail or vedro is to hold 30 lbs. of distilled water at 16.6° (Celsius), and a garnietz 8 lbs. of water. The unit of length is the arshin, equal to 71.12 centimetres. The metric system is to be optional, and may be used on a par with the Russian in commerce in dealing with contracts, accounts, &c., and after mutual agreement by State and municipal authorities. No one, however, is to be compelled to use the metric system when dealing with the above-named authorities.

JAPANESE SOAP-INDUSTRY.—At the present time there are about thirty soap-factories in Osaka, but only four or five of them are backed up with a capital of 40,000 to 50,000 yen. The total output last year was estimated at 700,000 yen, as the result of gradual increase year after year. Of this amount less than one-fifth finds its way to foreign countries. The Osaka factories import tallow from Australia to the extent of 1,200,000 catties, valued at 180,000 yen, annually, the home-supply often getting exhausted. The wholesale prices of their soaps range between 6 sen and 2 yen per dozen. The grademostly in demand sells wholesale at about 20 sen per dozen. The principal foreign markets for their soaps are China, Korea, India, and Vladivostock. Samples have been sent to Australia and the United States, but few orders have yet been received from those quarters. The manufacturers once enjoyed a profit of 20 to 30 per cent., but this has been reduced to 10 per cent. or less. They have, however, recently raised the prices by 10 per cent. on an average.

GERMAN EXPORTS OF SOAP AND PERFUMERY.—Mr. Louis Stern, commercial agent at Bamberg, Bavaria, writes to the Bureau of Foreign Commerce at Washington that the exports of German soap and perfumery are steadily growing, the value of toilet-soap exported from Germany rising from £904,000 in 1897 to £999,600 in 1898, whereas in 1889 the German export in this line amounted to scarcely £475,000. The principal countries buying fine soap in the German market were Great Britain, Belgium, Switzerland, Netherlands, and France. Russia, China, and the Dutch East Indies also receive considerable quantities of German fancy soap. A falling-off, however, is observable in the exports to the United States, where this branch of manufacture has so largely developed of late years (says Mr. Stern) as to compete with the German trade. The exports of perfumery from Germany amounted in 1898 to £2,118,000, being an increase of nearly £250,000 over those of 1897. Their principal customers for this article are Belgium, Holland, Austria, Russia, British East Indies, China, the Dutch East Indies, and Australia. There has been an increase in 1898 in the exports of German perfumery to all these countries; only the exports to the United States and Switzerland show a falling-off.

INDIAN ECONOMIC MUSEUM.—In a letter recently addressed to the Bengal Chamber of Commerce, Dr. George Watt, reporter on economic products to the Indian Government, asks members to furnish samples of Bengal products for the use of the Calcutta Commercial Museum. It is proposed, he says, that the Economic Gallery be opened by the Viceroy some time during the ensuing cool season. Amongst the products which he desires are samples (not less than 5 lbs. in weight) of each important quality of sticklac, seedlac, buttonlac and shellac, and also prepared varnishes. He wants all the forms of oil-seeds (linseed, castor, sesame, rape, mustard, poppy and cocoanut), and oils in 5-gal. tins of every quality. The original oil-tins would be preserved for the factory-name and trade-mark, but the oil would be shown in large glass jars. The Bengal castor-oil trade should be fully illustrated. In this section beeswax, soap, and perfumery are also asked for. Dr. Watt would likewise welcome special contributions illustrative of the drug-trade of Bengal, cinchona, chiretta, and aconite being mentioned as the more important; and as it is believed there are several chemical-works in India, it would be desirable that they should be represented.

DRUGS valued at 120,360L were imported into Belgium from Great Britain during 1898.

Commercial Notes.

SULPHUR-TRADE OF SICILY.

Reporting on the trade of Sicily for 1898, Mr. Consu Churchill, of Palermo, states that in the sulphur-industry some 30,000 people are employed. During the past two years the production of ore has been as follows:—1897, 3,092,382 tons; 1898, 3,163,146 tons. In 1897 there were 642 mines in activity, whilst in 1898 the mines in activity reached a total of 695. The exports of sulphur in 1897 amounted to 427,823 tons, whereas in 1893 the figures rose to 462,393 tons.

BAD BUSINESS FOR BRITAIN.

British trade with Madagascar, since the imposition of a protective tariff on all goods other than those of French origin, is now quite infinitesimal, so much so that the Acting Vice-Consul, in his latest report, makes little or no reference to it. "Drugs," he says, "often fetch good prices, but are now ordered from France. The natives require chiefly quinine, Epsom salts, iodide of potassium, bichloride of mercury, santonin, cod-liver oil, carbonate of soda, tartaric acid, and seidlitz-powders."

WEST AFRICAN KOLA.

A Colonial Office report on the trade of Gambia in 1898, states that the quantity of kola-nuts imported from Sierra Leone was 33 per cent. less than in 1897—viz., 520,366 lbs. against 834,441 lbs. The value, however, was about the same (22,000£), as, owing to the disturbances in Sierra Leone, there was a considerable advance in prices. These kola-nuts (says Administrator Sir R. B. Llewellyn) are consumed entirely by the natives, especially the Mahomedans, and they are offered to a friend when visiting in the same way that a European tends a cigar. We think we would, however, prefer the cigar.

DRUG-TRADE IN THE UNITED STATES.

In the export drug-trade of the United States there has been a steady increase during the last few years. Especially is this true of American patent medicines and proprietary articles. In 1889 the exports of drugs and chemicals to foreign countries amounted in value to \$5,542,753, while in 1898 the figures had risen to \$9,441,763. The value of patent medicines exported in 1889 was \$1,769,202; in 1898, \$2,460,669. Of imported drugs New York naturally receives the greatest proportion. In Philadelphia, however, drugs are imported on a large scale, and the manufacturing interests there are of importance. Boston and Baltimore, as Atlantic coast cities, come in for a goodly share of the business. From all these cities distribution is made to the country through large wholesale houses in leading cities, as Chicago, Detroit, St. Louis, New Orleans, and San Francisco. Some firms, however, in these cities import direct from Europe. Pill-manufacture plays no mean part in the drug-trade on the other side of the pond, and it is stated that there are 50,000,000 pills taken every week in the U.S., as against 40,000,000* in Great Britain. Improved processes have made it possible for big factories to be operated, where thousands of private prescriptions are kept and orders filled for doctors and druggists all over the country. The whole business has by degrees passed into the hands of these few big concerns, who can execute an order for 5,000,000 pills at a time and who make single shipments to Europe of 2 or 3 tons, or 40,000,000 to 50,000,000 pills. The United States is the paradise for the patent-medicine maker, and about one-third of the total sales of the retail druggists is made up of patent medicines. The money spent by the manufacturers of such in advertising alone is something enormous. Many of the leading firms contract for between \$250,000 and \$500,000 a year. In the retail-drug business, as in England, it has become quite the thing for small storekeepers to put up medicines under their own names, which are offered by them as "just as good" as the well-known brands on the market. In fact, there are big chemical-works which make such goods to order for hosts of druggists and have made a good thing out of it.

* This fact was published in the *C. & D.*, March 15, 1890, as indicating the consensus of opinion of the chemists and druggists of this country.—Ed. *C. & D.*

Marriages.

HURST—LEWIS.—On August 16, at Heneage Street Baptist Church, Birmingham, by the Rev. Geo. West, James Vernon Hurst, export manager, Southall Brothers & Barclay (Limited), to Emily Alice Lewis, of Havelock Road, Saltley, Birmingham.

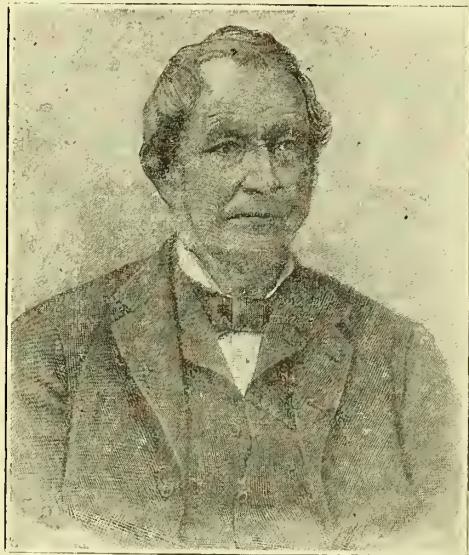
PEARSON—PEYTON.—On August 9, at St. James's, Piccadilly, by the Rev. F. W. Parkes, M.A., George Edward Pearson (of Messrs. Burroughs, Wellcome & Co) to Clorinda Teresa Peyton, only child of James Peyton, London.

Deaths.

ALLANSON.—At Hamilton Street, Wishaw, on August 20, William Allanson, chemist and druggist, in his 59th year.

BATES.—On August 3, Edward Bates, chemist and druggist, Kennington. Aged 42.

BUNSEN.—We were unable to obtain a portrait last week in sufficient time to accompany our notice of Professor Bunsen's death. The one which we now give is reproduced



from a portrait of the Professor, painted when he was at the zenith of his career as a teacher and investigator, and while his mental faculties were at their keenest. For this portrait we are indebted to the *Pharmaceutische Zeitung*, which prints an appreciative biographical sketch of the Professor.

EBBAGE.—At 11 Hall Quay, Great Yarmouth, on August 18, Gervais Kerner, the infant son of Harry Ebbage.

FIELD.—On August 16, at East End Farm, Flitwick, Mary Elizabeth, the wife of William Field, chemist and druggist, Church Street, Wolverton, Bucks, formerly of Rotherfield, Tunbridge Wells.

HARRY.—On August 7, Samuel Rhys Harry, chemist and druggist, late Sloane Square, London, S.W. Aged 36.

HENDERSON.—At Freshfield, Dollar, on August 22, Catherine Paterson Ross, wife of the late James B. Henderson, chemist, Dollar.

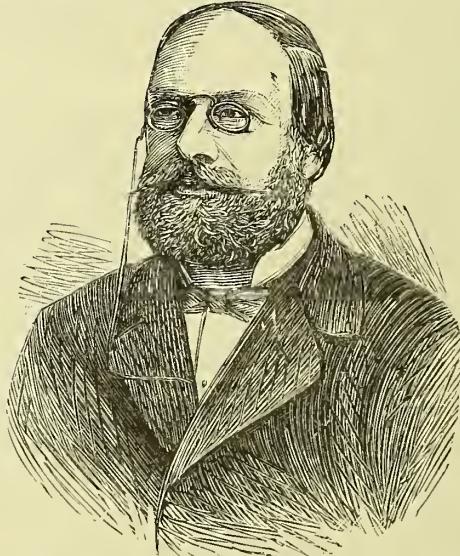
OWEN.—On August 14, John Owen, chemist and druggist, Christchurch. Aged 81.

PARRISH.—On August 11, at Chatel Guyon, France, Dillwyn Parrish, of Philadelphia, United States, late of Hyde Park Court, London. In his 60th year. The deceased gentleman was a son of Mr. Dillwyn Parrish, the well-known Philadelphian pharmacist. His father was the first President of the Philadelphia College of Pharmacy, but retired from active business before his brother Edward, who invented the familiar syrup. Mr. Dillwyn Parrish, jun., was an engineer, and came to London about a generation ago to introduce the tramway-system.

PEEL.—Sir Charles Lennox Peel, G.C.B., died at Woodcroft, Cuckfield, Sussex, on August 19. Sir Charles was Clerk to the Privy Council from 1875 to 1898, and during that time his name was frequently heard by pharmacists in respect to negotiations between the Pharmaceutical Council and the Privy Council, conducted usually through Mr. Carteighe. The negotiations were mostly negative in nature, but a considerable section of pharmacists felt that when Sir Charles was Clerk they had "a friend in court." He was a nephew of Sir Robert Peel, the celebrated Prime Minister. He was born in 1823.

SUMMERS.—On August 9, at 15 Norton Folgate, London, E., James R. Summers, pharmaceutical chemist. Aged 79.

WALDHEIM.—Anton Schürer von Waldheim, the well-known Austrian pharmacist, died on August 13, at the age of 69. Herr von Waldheim was born on February 24, 1830. He completed his studies at the Academic Gymnasium in 1848, and became a pupil in his father's apothecie in Vienna, at the same time pursuing his studies in philosophy. In 1852-54 he went through the pharmaceutical course at the Vienna University, and took his diploma in the latter year as Master of Pharmacy. After having served in pharmacies in Dresden, Paris, and London, he, on the death of his father, on February 1, 1856, took over his apothecie "Zur goldenen Krone," in Vienna, which he carried on to his death, taking an active part in it until two years ago, when he was prostrated by illness. Anton von Waldheim was the leader



of Austrian pharmacy, and was delegate of the Austrian Apotheker Verein at the International Congresses of Pharmacy in Paris (1864), Vienna (1868), St. Petersburg (1875), London (1881), and Brussels (1885). At St. Petersburg he was chosen President of the Congress. He was the first to give a reasonable turn to aspirations in regard to an International Pharmacopœia, and submitted an elaborate draft of one to the Brussels Congress. Von Waldheim was an honorary member of the German Apotheker Verein, the Pharmaceutical Society of Great Britain, the British Pharmaceutical Conference, the American Pharmaceutical Association, and Pharmaceutical Associations or Societies of Philadelphia, St. Petersburg, Moscow, Paris, Madrid, Turin, Copenhagen, Ghent, Antwerp, Warschau, Budapest, and Prague. He was Knight of the Franz Joseph Order and of the Russian St. Anna Order. His compatriots were wont to say that he possessed a golden heart and an iron will, and the first gained for him the name of "Father of Austrian Pharmacy," and the latter "Pharmaceutical Bismarck." Our portrait of Von Waldheim is from a photograph which he gave us when he attended the Brussels Congress in 1885.

WOOD.—On May 23, Edward Wood, pharmaceutical chemist, Wallington, formerly of Brighton. Aged 68.

Legal Reports.

County Court Cases.

ASSISTANTS' HOLIDAYS.

AT the Worthing County Court on Monday, the case of Williams v. the Sussex Drug Company (Limited) was heard, in which Herbert E. Williams sought to recover 5*l.* in lieu of holidays to which he said he was entitled while with the defendant company at both Hove and Worthing. Judge Martineau was on the bench, and Mr. Willet was for the plaintiff and Mr. Grinsted for the defendants.

His Honour said he could not understand the cause of action at all.

Mr. Willet explained that it was an action to recover damages in lieu of a holiday. For about fourteen months plaintiff was in the employ of the defendants, as dispenser and manager at two of their shops, and when he applied for a holiday they would not grant it to him.

His Honour: What happened then? Did he take one?

Mr. Willet: Yes; he took one.

Mr. Grinsted: He had notice to leave.

His Honour: I want to understand the point. When refused a holiday, did he go away and take a holiday?

Mr. Willet: He took a holiday, and then left their employment.

His Honour: After leaving their employment, he took a holiday?

Mr. Grinsted: He had notice to leave, and when he applied for a holiday that holiday was refused, and then he left at the conclusion of the notice that had been given him. He took no holiday at all.

His Honour confessed that he did not understand the action at all. What right had he to sue for damages for not getting a holiday?

Plaintiff, when sworn, said it was the custom amongst chemists to allow their assistants an annual holiday to the extent of a day for every month they had been in their service. Having been fourteen months in the service of the defendant company, he was entitled to a fortnight's holiday, but when he applied for his holiday he was told that he had not been with them long enough to justify one.

His Honour said it might be very hard, but no one had a right to a holiday unless it was agreed to beforehand.

Mr. Willet said he would prove the custom of the trade.

Mr. Grinsted asked if it was necessary for him to answer the case.

His Honour said he did not know the cause of action.

Mr. Willet: My contention is that the custom of the trade is that a qualified chemist is entitled to a holiday of one day for every month of his service. The whole time my client was there he had no holiday.

His Honour said he could not claim compensation for not getting this holiday. If a holiday is agreed upon, when the day comes for your holiday it is right that you should go, but if you don't go and you are refused permission to go, you have no compensation for that. To succeed with this action Mr. Willet would have to prove the custom of allowing a man a holiday or a sum of money by way of compensation. Had they not paid plaintiff for all the time he was in their service?

Mr. Willet: Yes; but he was entitled to this holiday, and to be paid wages for the whole holiday.

His Honour: They paid wages for the whole time. I cannot understand this; I never heard of such a thing. Have they not paid him for the whole time during which he was in their service, week by week?

Mr. Willet: No; it was for a fortnight after he left.

His Honour: Oh, you say you took the holiday at the end, and now claim the amount?

Mr. Willet: That is so.

His Honour: Judgment for defendants, if that is the case. There is not the slightest cause for action on that ground.

Mr. Grinsted remarked that there was a good deal to be said on the other side.

DELAYED COMMISSION.

AT the Epsom County Court on August 18, Judge Lushington heard a case in which Mr. Pearson, a commercial traveller of

Reading, sued Mr. Randall, chemist and druggist, Epsom, for 16*l.* 15*s.* in respect to commission on the sale of a business at Addlestone to Mr. F. Daniels. The evidence showed that the business was sold in 1891 for 650*l.*, and plaintiff claimed that he was promised 2½ per cent. commission, but his claim for it was delayed on account of the fact that the full payments for the business were deferred (by arrangement) until June last. For the defendant it was explained that there had been no agreement to pay plaintiff a commission. It was not denied that he had assisted in introducing a purchaser, but the first defendant heard of commission was after the sale, when plaintiff called on him and asked what "his little bit" was going to be. Then in June last he wrote asking for the amount claimed, but received no reply. It was argued for the defence that as the cause of action arose seven years ago any claim was statute-barred. The Judge suggested that the parties should try to settle the dispute privately, but on the resumption of the case they had not agreed, and his Honour having pointed out that the statute provided that no action lies to charge any person upon any agreement that was not to be performed within one year from the making thereof, decided against the plaintiff accordingly.

Sale of Food and Drugs Act.

SWEET SPIRIT OF NITRE.

AT Amthill Petty Sessions on August 17, Mr. Herbert Hall, drug-vendor, Cranfield, was summoned for selling sweet spirit of nitre which was not of the nature, substance, and quality demanded by the purchaser. The Bench, on the application of the police, adjourned the case for a fortnight.

AT Barnsley Police Court on August 16, Miriam Tomlinson, a shopkeeper, of Darfield, was summoned for selling sweet spirit of nitre which was not of B.P. quality. The case was considered to be of importance, and Mr. Hodgson, barrister, Manchester, appeared for the defence.

Mr. Wardle, for the prosecution, in his opening remarks pointed out to the Bench what the requirements of the B.P. are and what the nature of the sample in question was—namely, it was deficient to the extent of three-sevenths, as shown by the analysis of Mr. A. H. Allen, the county analyst, who was called as a witness.

Mr. Allen, in the course of his evidence, stated that the sample contained 0.98 per cent. of nitrous ether and alcohol and legitimate water 99.02 per cent. His certificate added, "These results show that the sample contained only four-sevenths of the real nitrous ether, the B.P. requiring not less than 1½ per cent." Replying to the Bench, he said sweet spirit of nitre was the official synonym for a drug which was more scientifically known as spirit of nitrous ether. The test for this spirit was one devised by himself and adopted by the Pharmacopœia. The greater number of samples of sweet spirit of nitre which he had received for examination in the last six months had been in accordance with the requirements of the British Pharmacopœia, which showed it was possible to use and sell the article of fair quality. In cross-examination, the witness said if the bottle was kept in a hot shop-window in the sun, and the bottle occasionally opened, evaporation would be more rapid than if it was properly kept in a cool place. He would not say that the sample might not have evaporated to this extent since May. It could only be kept absolutely good by being kept hermetically sealed.

Mr. Hodgson submitted that the Act did not apply in such a case as this, where admittedly there had been no fraud on the public, as the result was due to causes beyond control.

Mr. A. J. Coates, chemist to Messrs. Parkinson & Son, wholesale druggists, Burnley, called in support of the defence, said that he had tested the spirit by Allen's method when it was sent out, and found that it contained 2½ per cent. of nitrous ether. This was in May last, when the spirit was supplied to Mr. James Hinchcliffe, wholesale grocer, Barnsley, who supplied defendant with it. The Bench consulted, and, on returning, the chairman said they were satisfied the drug was not of the quality demanded. There was no allegation of adulteration or tampering, still it was clear the public were not receiving what they should receive. This being the first case, a fine of only 10*s.* and costs was imposed.

Beecham's Pills.

IN the Vacation Court on August 23, before Mr. Justice Cozens-Hardy, the case of *Beecham v. Cullingford* was heard on a motion for an injunction to restrain the defendant, of Coventry Road, Birmingham, from selling as Beecham's pills any pills which were not of the plaintiff's manufacture. It was now stated that the defendant was prepared to treat the motion as the trial of the action, and to consent to a perpetual injunction, in addition to paying an agreed sum as damages, and costs. His Lordship made an order accordingly.

Liebig's Extract.

IN the Vacation Court on August 23, before Mr. Justice Cozens-Hardy, Mr. Mulligan asked that the case of *Liebig's Extract of Meat Company (Limited) v. Stacey & Co.*, which was a motion for an interim injunction to restrain the passing-off of meat-extract not of the plaintiffs' manufacture, might stand over for another week, as the defendants had recently filed fresh affidavits. His Lordship assented to this course.

WE understand that the Castner-Kellner Company's recent application to the House of Lords desiring that the Commercial Development Corporation (Limited) should, in the event of the former succeeding in their appeal to the House of Lords, give an undertaking to repay any costs they have been ordered by the Court of Appeal to pay, has failed. This application followed a similar one to the Court of Appeal.

Bankruptcies and Failures.

Re Wm. Hy. Ritson Pearson, 114 North Road, St. Helens, Lancs, Dispenser, &c.

IN this recent failure the liabilities amount to 207*l.* 13*s.* 4*d.*, and there are no available assets. The following are creditors:—

	£ s. d.
Diggle, J. E., Heywood	22 15 0
Haslitt, F., Heywood	16 0 0
Hitchon, H. H. J. H., Heywood	23 0 0
Kershaw, Geo., Heywood	15 0 0
Royds, Sam., Heywood	19 10 0
Wild, Robert, Heywood	20 0 0

Re Peter Dutrulle, 27 Orlando Road, Clapham, London, S.W., Drug-merchant.

AT the statutory meeting of the creditors in this failure at the offices of the Official Receiver for the Wandsworth district on August 17, it appeared that the receiving order was made on July 27. Orders of adjudication and for the summary administration of the debtor's estate have since been made. The debtor stated that for the last three years he had been employed as a commission agent, and that his earnings as such had amounted to about 2*l.* 10*s.* per week on an average. For many years up to January, 1894, he was in partnership with a Mr. Solomons, and carried on business as a drug-merchant in the City; but in January, 1894, the business was sold to a limited company, which was to take over the assets of partnership and liabilities to the extent of 500*l.* The debtor had not filed his statement of affairs, but promised to do so as soon as possible. He estimated his liabilities at about 2,000*l.*, and no assets of any kind, his furniture being covered by a bill of sale for 72*l.*, given in January last. Debtor alleged his failure to have been caused through a loss of 7,000*l.* on the erection of certain cement-grinding mills during the existence of the partnership owing to the defective work of the sub-contractor, and he stated that he became aware of his insolvency in January, 1894, when the partnership was dissolved. The estate was left in the hands of the Official Receiver for summary administration.

New Companies & Company News.

OIL AND MINERAL OPTIONS SYNDICATE (LIMITED).—Capital 6,000*l.*, in 1*l.* shares. Objects: To acquire and work any oil-bearing lands, &c., in the U.S.A. or elsewhere. Registered without articles of association.

LAW & CROSSLEY (LIMITED).—Capital 20,000*l.*, in 5*l.* shares (2,000 preference). Objects: To acquire two businesses carried on as "S. Law & Sons" and "J. F. Crossley," at Halifax, and to carry on the business of grocers, brewers, chemists, druggists, &c. The first directors are H. J. Law, C. E. Law, and H. Yarwood. Qualification, 500*l.*

RAGOSINE & CO. (LIMITED).—Capital 30,000*l.*, in 10*l.* shares. Objects: To acquire and carry on the business of manufacturers and refiners of and dealers in oils, pigments, varnishes, chemical, and other preparations, &c., carried on at 7 Idol Lane, E.C., as "Ragosine & Co." E. G. von Glehn is managing director for life. Registered office, 7 Idol Lane, E.C.

HOPE'S (LIMITED).—Capital 20,000*l.*, in 1*l.* shares (10,000 preference). Objects: To acquire the underlease of 147 High Street, Kensington, and to carry on the business of wine and spirit merchants, brewers, distillers, chemists, druggists, drysalters, &c. The first directors are J. W. Hope, J. E. Lewis, J. H. Cain, and J. J. Saint. Qualification, 500*l.* Remuneration, 50*l.* each per annum, when 8 per cent. is paid on the ordinary shares.

LLANTRISSAINT OCHRE, OXIDE, AND IRON-ORE CO. (LIMITED).—Capital 10,000*l.*, in 1*l.* shares. Objects: To acquire the business in ores, yellow ochre, red oxide of iron, and other minerals carried on by R. Sloman, of Bristol, and to manufacture and deal in colours, pigments, &c. The first directors are J. H. Perry, H. C. L. Matthews, and S. Sloman. Qualification, 500*l.* (managing director, 1,000*l.*). Remuneration, as fixed by the company.

CARROLL & CO. (LIMITED).—Registered at Dublin. Capital 200*l.*, in 1*l.* shares. Objects: To carry on the business of chemists and druggists. The subscribers are:—T. J. Carroll, registered druggist, Mrs. M. Carroll, Miss C. Carroll, and Miss M. Carroll, all of Bank Place, Kilmallock; M. A. O'Leary, 27 O'Connell Street, Dublin, draper; and T. O'Leary, farmer, and Miss M. O'Leary, both of Ballycullane, Kilmallock. Registered without articles of association. Registered office, Bank Place, Kilmallock, co. Limerick.

STOURFIELD PARK CO. (LIMITED).—Capital 25,000*l.*, in 1*l.* shares. Objects: To acquire certain property at Pokesdown, Southampton, and to carry on thereon the business of a sanatorium for the open-air cure of lung-complaints now carried on at Sunny Mount and Cure à l'Air, Meyrick Park, Bournemouth, by Dr. W. D. Johns. The first directors are J. A. Hosker, M.R.C.S., J.P., C.C., W. Gibson, C. Harris, J.P., and W. D. Johns, B.A., M.B., B.S., L.S.A. Qualification, 250*l.* Remuneration, 350*l.* per annum, divisible. Registered office, Sunny Mount, Stourfield Park, Southbourne Road, Bournemouth.

B. HEPWORTH & CO. (LIMITED).—Capital 5,000*l.*, in 1*l.* shares (2,000 deferred). Objects: To acquire the business carried on at the Chemical-works, Coventry Street, Kidderminster, as "B. Hepworth & Co.," and to manufacture and deal in chemicals, drugs, soaps, tallow, medicinal and other preparations, &c. The subscribers are:—E. A. Cotton, 49 Farfield Street, Kidderminster, carpet designer; H. T. Everist, 45 Farfield Street, Kidderminster, professor of music; H. E. Purkis, The Elms, Old Winford, Stourbridge, clothier; J. Fehrenbach and Frank C. Fehrenbach, both confectioners, of 3 Coventry Street, Kidderminster; J. Killingley, 31 Lark Hill, Kidderminster, mill furnisher; and G. A. Weston, Church Street, Kidderminster, solicitor. The first directors are H. W. Gethin, A. Cotton, J. Harvey, J. Killingley, H. E. Purkis, and B. Hepworth (managing director). Qualification, 200*l.* Remuneration, 30 guineas per annum, divisible.

ULSTER CHEMISTS (LIMITED).—The *Investor's Review*, in criticising this concern, suggests that "the shareholders should bestir themselves, insist on having proper accounts submitted, clear out the present directors, and write down

the capital to one-third or one-half. The prospects promised dividends of 10 per cent. on the ordinary shares, but the result of the first thirteen months' working is that they get only 2½ per cent., and the effort to pay so much (or little) has resulted in the preference dividend due June 1 last having to be passed."

CIVIL SERVICE SUPPLY ASSOCIATION (LIMITED).—The report of the committee of management for the half-year ended June 30, to be submitted at the half-yearly meeting to be held in London on August 29 states that the number of members on the share register is 5,333, and the number of shares 354,480. There are 47,086 ticketholders, of whom 15,967 are members of the Civil Service and 31,119 are friends of shareholders. Goods were bought to the amount of 713,004*l.*, and sold to the amount of 839,285*l.* The stock in hand at the close of the half-year was valued at 327,745*l.* The gross profit on the trading amounted to 124,034*l.*, and 1,517*l.* was received from other sources of revenue, making the total gross income 125,550*l.* The working-expenses, excluding carriage, were 79,955*l.*, being at the rate of 9*l.* 10*s.* 6*d.* per cent. on the amount of the sales. After allowing for interest on the reserve fund, 1,400*l.*, the net balance for the half-year amounts to 24,131*l.*, which, added to 4,782*l.* brought forward from last half-year, makes a total of 28,913*l.* Out of this amount the committee recommend that a payment be made at the rate of 12*s.* in respect of every ten 1*l.* shares, that 2,000*l.* be transferred to the reserve fund, and that 1,000*l.* be granted to the pension and gratuity fund and 250*l.* to the employés provident fund. The sum of 4,395*l.* will then remain to be carried forward to the next half-year.

MAYPOLE COMPANY (LIMITED).—At the Holborn Restaurant, on August 22 an adjourned extraordinary general meeting of the shareholders of this company was held. Mr. V. M. Holt Beever occupied the chair. The meeting had been called for a proposal to be put before the shareholders as to a reconstruction-scheme, but was adjourned to allow of the accounts to be presented before the meeting. Since the adjournment, the Chairman said, they had discovered that the Receiver, who, it had been agreed, should take out the account, could not do so without an order of the Court, which would have caused delay. The directors therefore decided to have an audit and pay for it out of their own pockets, and they now put it before them. The figures practically stood as they had been given before.

Mr. Gregory, a shareholder, said the directors might have saved their money, as the auditors seemed afraid to sign the audit. Mr. Lampson thought the company's products had not been pushed sufficiently amongst those who could sell them—he meant chemists. He felt sure that if chemists were given a little more facility for the sale of the Maypole soaps—better terms, or something of the sort—sales would rush up tremendously. Taking the number of chemists throughout the country, it was palpable on the face of it that they could do the company an enormous amount of good. The company would be losing a great opportunity if they did not advertise amongst chemists and push its articles in that direction. (Cries of "Hear, hear" and "Let us try.")

Mr. Davey, who said he was a large shareholder, created considerable amusement by saying that he was the one who, at no cost to the company, put the soap before the Prince and Princess of Wales; but it was not till thirteen months had elapsed that a few handbills were sent round amongst the chemists announcing the facts. Mr. Davey also remarked that the costs of the firm were too heavy, they even paying 35*s.* a week to some of the girls. (Laughter.)

Mr. Deakin (managing director): Yes; and one of them married our late secretary, Mr. Murray. (Laughter.)

Mr. Murray: Do not you say anything against the lady, Mr. Deakin—(renewed laughter)—or you may regret it.

Mr. Frölich, the late export manager, then gave a long explanation as to his reasons for leaving the company, which, he said, were based upon the way the company carried on its business.

Mr. Murray also said the same thing, adding that he could have wrecked the company on July 18. He frankly admitted that he was going to hand over the formulas of dyes to Messrs. Bonsor & Co.

A Shareholder: Made by you while in the employ of the Maypole Company?

Mr. Murray: I improved on the formulas as they were, or the soap could never have been made at all. (Cries of "Oh! oh!")

A Shareholder: Then we can take it that you are going to sell trade-secrets?

Mr. Murray: I was not engaged to make dyes, but as secretary.

A Shareholder: But if you do anything for the advancement of the company whilst in their employ, you must not sell that knowledge.

Mr. Murray: I have told you what I intend to do. Any inventions I have made since I left the Maypole Company have nothing to do with them.

Mr. Black (a director) said that it was in consequence of what Mr. Frölich said to him while Mr. Deakin was in Ireland that he got the opinion that Mr. Frölich and Mr. Murray were trying to wreck the company, and he told Mr. Deakin so on his return. Mr. Frölich told him he thought that the Maypole Company would be glad to get rid of the goodwill of the business for 1,000*l.*, and that it would be a good idea to buy it out. "I thought otherwise," Mr. Black added. (Loud laughter.)

Mr. Deakin confirmed, in his speech, the allegations that he made against Messrs. Frölich and Murray in an interview printed in our last issue. He said the shareholders could see with what class of men they had to deal, but he was glad to say that Mr. Murray had taken one unpleasant task out of his hands—that of pointing out to the shareholders that he (Mr. Murray) was selling the secrets of the Maypole Company to another firm—by admitting it.

Mr. Murray: I have done nothing of the kind. (Cries of "Yes, you have.")

In conclusion Mr. Deakin said he attributed the wrecking of the company to the actions of Messrs. Frölich and Murray—whereat those individuals laughed loudly.

The Chairman, learning that there was a technical legal difficulty with regard to the passing of the resolutions at this meeting, formally adjourned it until Thursday.

Throughout the meeting, which lasted two hours, it was one scene of uproar, the cry of "Liar!" being heard every few moments.

The meeting was resumed on Thursday afternoon, Mr. Beever presiding. The resolution for the voluntary winding-up of the company was put to the meeting, but an amendment was proposed by Mr. Harvest, and, after a suggestion that retailers would find it to their interests to have shares as well as push the article, the amendment, on being put to the meeting, was lost. A poll was demanded on the resolution, at the end of which the Chairman announced that it had been carried by the requisite majority.

Gazette.

PARTNERSHIPS DISSOLVED.

Pinkerton, Gibson & Co., North-east Thistle Street Lane, Edinburgh, who are manufacturing chemists and druggists; as far as regards Wm. L. Beaumont and John Harkness, Adam Gibson remaining sole partners.

Sykes, W., and Richardson, M. J., under the style of Sykes & Richardson, Gosport and Alverstoke, general medical practitioners.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATION.

Prime, Edward, Colchester, veterinary surgeon.

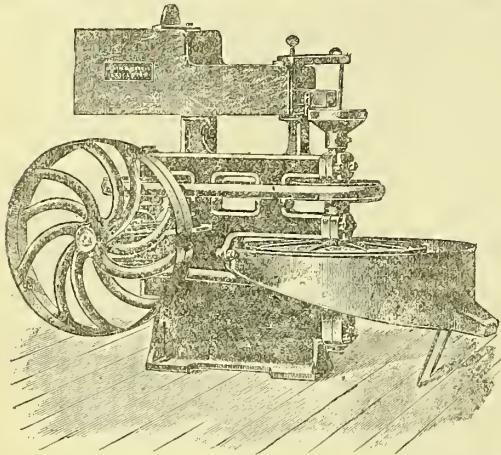
A FRENCH CONSULAR report gives the following names as exporters of vanilla from Tahiti:—Mme. veuve Drolet (French), MM. H. Meuel (German), Maxwell (American), A. Cape (English), Donal & Edenborough (English); Société Commerciale de Réunion, (German), La Caisse Agricole (French).

THE ANALYSIS OF TEARS.—The famous chemist Kalimeyer has a scene with his wife, who finally bursts into tears. "Your tears don't have any effect with me—for what are they? A mighty small percentage of phosphorus salts and a trace of chloride of sodium—all the rest is water!"—*Lustige Blätter.*

Novelties.

WHOLESALE PILL ROUNDING AND COATING.

WE had an opportunity recently, through the courtesy of a London wholesale drug-firm, of examining the automatic pill-rounding manufactured by Messrs. Death & Harris, engineers, Leicester, in actual use. The accompanying illustration will give an idea of the machine. The cut pills are placed first in the box arrangement, which feeds them automatically into the rounder beneath, from which, after being rounded, they fall out in a continual shower into another receptacle, and thence to the tray. The machine



works smoothly and without trouble—one attendant can look after two or more machines—and the finished pills are quite equal to those turned out by hand. The economy in time and labour is also great, the rounder being capable of finishing off from 20 to 40 lbs. or more in an hour. An improved ball-bearing pearl or sugar coater made by the same firm was also inspected. This is claimed to be an improvement on the old-fashioned sliding-block principle; and it certainly runs easily, and gives satisfaction to the firm whom we interviewed. The motion is the same as would be produced by holding the coating-pan by a stem in the two hands, and giving the pills a swirling movement. These machines are, we understand, being used by many of the wholesale houses throughout the country who make a speciality of pill-manufacture.

NEW FORMALIN SPECIALITIES.

THE Formalin Hygienic Company (Limited), 9 and 10 St. Mary-at-Hill, E.C., have introduced several new specialities in which formalin is the active principle. One is an antiseptic and disinfecting powder put up in tins with a perforated top. This powder possesses the peculiar advantage of being adapted for use in any part of the house, as on exposure to the air it gives off formaldehyde vapour slowly, so that the air becomes charged with it and any bacilli that are about are killed. It is especially useful for sprinkling in larders during the hot weather, so as to preserve the contents, as well as for the purposes to which disinfectants are applied. Two new soaps are also introduced. The formalin toilet-soap is put up in crimson leatherette boxes to retail at 2s. each; each tablet is wrapped in tinfoil and crimson leatherette wrapper. The soap is pure white, and well made. It contains an appreciable amount of formalin, and on account of its detergent and therapeutic properties is well suited for summer use, as it is believed to preserve the skin from those subcutaneous changes which spoil the complexion.

A similar soap which gives a remarkably lasting lather is made for shaving. This is very agreeable to use and sells at 1s. a cake.

“FIREPROOFINE.”

THE heading to this paragraph explains only to a limited extent a new preparation which is just now being introduced into this country from the United States. “Fireproofine” is a chemical compound, obtainable either in powder for solution in water or in the liquid state itself, and possesses the invaluable property of enabling any article, when saturated with it, to resist ignition, even when exposed to the naked flame. The article is now on show at 90 Regent Street, W., and the samples may be tested by all comers. The shop at the above address is almost surrounded by a number of naked gas-jets, over which are hung articles of the flimsiest texture; netting, cotton and woollen curtains, light clothing, and paper are in actual contact with the gas-flame, without blazing. The only effect is that the part of the article which touches the flame becomes carbonised. All that is necessary is to saturate the article to be rendered inflammable in “Fireproofine.” Its action upon any fabric or material is non-injurious, neither will it have any ill effect upon the hands or face. In addition to rendering the article fireproof, it is also a cleansing-liquid, and may be used in the household in the same manner as is ammonia, and also in place of water for starched articles. We were shown a wisp of hay that had been saturated in the fluid, and this was placed over a flaming gas-jet, with the result that the only part which became carbonised (it did not blaze) was that which came in actual contact with the flame; the ends which projected from the burner were untouched, and the flame did not spread to them. The preparation, which is put up in quantities from a quart-bottle size to a 40-gal. drum, is sold at a cheap price. The sole distributing-agents for this country are Messrs. W. B. Fordham & Sons (Limited), York Road, London, N.

Trade Notes.

MR. B. ADAMS, of Mansfield, makes a special offer of extract of herb-beer for September, the feature of which is that with orders from half-a-guinea upwards he gives the purchaser abundance and variety of advertising material.

PERFUME-LIST.—Messrs. Jules Vigo et Cie. (Limited), 24 Newbury Street, Aldersgate, E.C., announce that they will be pleased to send a copy of their new list to any chemist applying for it. The list is illustrated and has a classified index, so that the discounts allowed can be readily shown. Christmas novelties in perfumes form a feature of the list.

OPTICAL CATALOGUE.—Messrs. F. Darton & Co., manufacturing opticians, Clerkenwell Optical-works, 142 St John Street, Clerkenwell, E.C., send us a copy of their new “Private Net Trade-list.” The first section deals with the requirements for the spectacle-trade. Not only are spectacles and eye-glasses of various kinds given, but the odds and ends required for jobbing-work, trial-cases, and test-cards are shown and priced. Other parts of the list deal with opera and field glasses, telescopes, compasses, microscopes, dynamos, barometers, and cameras, which are figured in an endless variety. The list, which is supplied on receipt of a business-card, will be found a most useful one to chemists, and especially to those who add some of the scientific side-lines to their business.

THE demand for indigo for dyeing-purposes in Foochow now exceeds the supply, as the shipments from Formosa have been stopped. Canton and Swatow are the chief sources of supply, and samples have been sent to India with the object of stimulating competition.

Proprietaries in 1930.

"There is a budding morrow in midnight."

THUS wrote the poet in the days before the great change, recking nothing of proprietary articles or "cutting," but speaking out of the great darkness as truly of them as of all things by the inner light of prescience into all truth, which is the real poet's greatest attribute. So quickly in these days does the mind accept and adapt itself to new conditions and forget the things from which these sprung, that it seems good for one who well remembers the bad old times to make this record for the sake of history.

Looking backwards from the high noon of that morrow which has now become to-day, let me retrace the stages which "marked the dawning of the better day."

"Cutting," which once proprietors had regarded as the apple of desire, had on closer acquaintance proved an apple of Sodom on their lips, or, to change the metaphor, a serpent that only stung the bosom that had warmed it into life, stinging first the retailers till they withered and wriggled in their pain, then proprietors began to feel the tooth, and so keenly that they were reduced to their wits' ends to know how to scotch the snake.

Thoroughly aroused at last, and goaded on both by their own suffering interests and by the mingled taunts, reproaches, and entreaties of the retailers, many and various were the moves tried by the almost despairing proprietors to stop the evil.

Individual profit-protection schemes and anti-cutting associations had their turn, but their measure of success was so small as to be clean forgot'en now.

At last out of the deep darkness came the great utterance which proclaimed "The Stirling Remedy." The Kodak people "pressed the button" and Mr. Justice Stirling "did the rest." What happened? Did the retailers and the proprietors at once see what had come and meet the light with one great shout? Not so. The change from deep darkness to dazzling light was too sudden. The very brightness temporarily paralysed the optic nerve, and it seemed as if the darkness still continued. Soon after the utterance was heard there came a great heat, as if the very elements were conspiring to keep back the coming of the change by lulling men to sleep in a fool's paradise till the utterance should be forgotten.

Thus, even after the giving of the Stirling word that made us free, there came a wail out of Ireland at a great trade convention held in London, which voiced the general blindness by expressing conviction (*C. & D.*, July 22, 1899, page 124) of "the absolute impossibility of the manufacturer preventing cutting and maintaining a standard price."

Gradually a proprietor here and there recovered vision, and recognised that the change had come. First those who had always striven hard to check cutting, and whose perceptive powers may have been abnormally quickened by dreaming of face-values in the dark old times, began to catch glimpses of the real meaning of the Stirling word, and the force of the reprove finally came home to others who sought not for light in Chancery. To them also the word became the now so well-known message that annihilated the cutting evil, and brought about the happy and prosperous conditions of to-day.

The conditions are not in themselves illegal, and must, like every other contract, be construed fairly. But knowledge of these conditions must be brought home clearly to the purchaser . . . All that would be necessary would be to put on the invoice of the goods a reference to the circular for the time being in force.

Those are the words which so rapidly brought about the Great Revolution.

How quickly all came to see their true and tremendous import! Retailers met and showed the proprietors that there was now not the slightest excuse nor reason for no profits, since it was made so easy to secure to them a fair and reasonable remuneration by numbering the goods and fixing the "sale conditions" on the invoice. Proprietors, equally eager to do this, were not slow to help the change. They saw that their efforts to stop cutting could at last be backed by all the weight and might of legal aid; that even associations to stop cutting were no longer needed because of the new-born power of individual contracts.

All this is now ancient history, but there was a time, which some of us still remember, when unbridled cutting ran its rampant course, and trampled under foot the field where now the fruits of industry and enterprise are reaped.

J. E. GARRATT.

Trade-Marks Applied for.

Anyone who objects to the registration of a trade-mark must address the Comptroller-General, Patent Office, Chancery Lane, W.C., within a month of the date of publication. When "no claim" is mentioned in the subjoined abstracts, this implies "no claim for the exclusive use of the word" in inverted commas.

(From the "Trade Marks Journal," August 16, 1899.)

"GERMACEENE" (no claim for "Germ"); for disinfectants. By J. R. Peace & Co., 41 Ormond Street, Liverpool. 221,826.

"KÜGLOIDS" (no claim for "Kugel"); for chemical substances. By H. H. Mason, 7 Broadway, West Norwood, S.E. 223,432.

"GASTRONE," wording, and device of chain-links (essential particulars, device and word "Gastrone"; no claim for "Gastro"); for medicine. By Gertrude A. Sargent, Ivyholme, Maplo Road, Surbiton, S.W. 223,547.

"SPELZEO"; for chemical substances. By J. H. Hogg, 6 Nightingale Park Crescent, S.W. 224,861.

"LIMOSE" and "SYRUPENE" (no claim for "Limo" or "Syrup"); for alcoholic beverages, mineral and aerated waters. By W. Meadowcroft & Son (Limited), 24 Regent Street, Blackburn. 223,688, 223,692, 223,687, 223,691.

"EVSTACH"; for all goods in Class 44. By Davy, Hill & Son, Yates & Hicks, 64 Park Street, Southwark, S.E. 224,276.

"ZANEX"; for perfumery and toilet-articles. By E. Jones, 60 Miles Bank, Hanley. 223,794.

(From the "Trade Marks Journal," August 23, 1899.)

"EIKONAL"; for chemical substances. By the Actien Gesellschaft für Anilin Fabrikation, Treptower Brieke, Berlin. 224,376.

"HUSKOLEIN," signature and pictorial device on label (no claim for "Husk," the essential particular being the word "Huskolein," signature and combination device); for veterinary preparation. By Day & Sons, Crewe. 222,576.

"FERMENTICIDE" (no claim for "Ferment"); for chemical substances. By W. J. Bush & Co. (Limited), Artillery Lane, E.C. 223,933.

"RESINOL" (no claim for "Resin"); for medicinal ointments. By the Resinol Chemical Company, 316 Lombard Street, West, Baltimore, U.S.A. 221,588.

"CRYSTOLINE" (no claim for "Crystalline"); for chemical substances. By Stern Brothers, 57 Gracechurch Street, E.C. 223,280.

"BRONASIA"; for cough-mixture. By Martin & Palmer, 1 and 2 East Street, Plymouth. 223,548.

"LAZAROL" (no claim for "Lazaro"); for an ointment. By H. Bohne, sen., Brunoswarte No. 14, Halle a/S., Germany. 223,603.

"FERRATOSE" (no claim for "Ferrato"); for medicines, &c. By C. F. Boehringer & Soehne, Waldhof, Germany. 224,001.

"HEMROL"; for medicinal preparations. By G. Myers, 45 and 46 Blackfriargate, Hull. 224,238.

"ECTHOL"; for a medicinal preparation. By Battle & Co., 2,001 Locust Street, St. Louis, U.S.A. 224,575.

"SANOS" (no claim for "Sano"); for mineral and aerated waters. By St. Anne's-on-Sea Table-water Company, 19 St. Albans Road, St. Anne's-on-Sea. 222,705.

"DAISY"; for mineral and aerated waters. By W. Meadowcroft & Son (Limited), 24 Regent Street, Blackburn. 223,684.

Device of mortar and pestle; for mineral and aerated waters. By M. Wilson, 38 Vennel, Greenock. 224,451.

"AMERUM" and "NECTRONA" (no claim for "Nectar"); for non-intoxicating aerated beverage. By the Potteries Amalgamated Mineral Water Company (Limited), New Street, Hanley. 224,725, 224,729.

Digitalis Preparations.

MR. JOSEPH W. ENGLAND has, in his capacity as chief druggist of the Philadelphia Hospital, had the opportunity of trying a large number of digitalis preparations, and, in consequence of observations in association with the physicians of the hospital, he has ascertained that a tincture made from digitalis-leaves freed from fat exerts its influence upon the heart much sooner than the official tincture, while its effect is more prolonged. This is well shown in the following summary of results:—

Case	Fat-free Tincture			Official Tincture		
	First Effect, Minutes	Full Effect, Minutes	Work or Beats Reduced	First Effect, Minutes	Full Effect, Minutes	Work or Beats Reduced
1	15	75	8	30	60	6
2	15	60	7	30	75	8
3	15	60	5	30	90	5
4	15	45	8	30	75	6
5	15	45	6	30	60	5
6 h.	15	45	12	30	60	5
7 h.	15	45	10	30	60	6
8 h.	15	45	8	30	60	8
9	15	45	8	15	60	10
10	15	30	6	30	30	2
11	15	—	9	30	105	9
12	15	45	6	30	60	8
13	15	45	10	30	45	6
14	15	45	3	45	105	6
15	15	60	8	45	45	—
Aver-ages	15	49	7.6	31	66	6.4

h., hypodermic cases; others by mouth.

Fat-free tincture is made by exhausting the leaves, while freshly ground (to a No. 60 powder), with purified petroleum benzine, either by maceration with solvent in excess for forty-eight hours, if in small quantity, or by maceration and subsequent percolation if in larger quantity, repeating the solvent treatment until all the fat, &c., is removed. The residue is then dried by exposure to air, taking care that no traces of benzine odour remain. While benzine is very volatile, the last portions of it volatilise rather slowly, relatively, when spontaneously evaporated, especially if adherent to vegetable structure. Exposure of the residue to the sunlight, as well as to open air, yields the best results.

After the benzine-treatment the dried and powdered leaves are made into a tincture according to the process for the U.S.P. product, 150 [for B.P. 125] grammes of leaves being used to make 1,000 c.c. with diluted alcohol [B.P., 60 per-cent. alcohol], with this difference, that the receiver is removed when the total percolate amounts to about 980 c.c., and it is then carefully neutralised with about 10 or 15 c.c. of ammonia-solution, and the product made up to 1,000 c.c. with sufficient fresh percolate or official menstruum.

Dr. H. D. E. Hughes, chief resident physician of the Philadelphia Hospital, states that the fat-free tincture is tolerated much better than the ordinary tincture.

In a later paper communicated to the *American Journal of Pharmacy*, Mr. England questions whether digitoxin ought to be considered as the active principle of digitalis. Since Kiliani's work on the subject it has been customary to reckon the value of digitalis according to the amount of digitoxin which it yields. Mr. England considers that it is impossible that digitoxin can be the dominating therapeutic principle of the drug, and after reviewing the literature on the subject (which goes to show that digitoxin is a water-insoluble substance possessed of intensely irritating properties), he concludes by saying—

Digitalis is sometimes cumulative in action. When taken for a long time there are occasionally exhibited symptoms without any increase in the use of the drug. This has been thought to be due

to the fact that the proximate principles of the drug were not excreted by the kidneys as fast as absorbed, and that they therefore accumulated in the body. But from the experiments detailed here, and in my paper on "Tincture of Fat-free Digitalis," it would seem to be more reasonable to believe that cumulative action, where existent, is due to the slow absorption and elimination of digitoxin. With a bed-patient, a good tincture of digitalis, for example, should yield primary effects in from fifteen to thirty minutes, and full effects in from forty-five to sixty minutes. Digitoxin, however, on hypodermic injections, requires, before any effects are shown, six hours and over. Now, if a large number of doses of a digitalis tincture are given, and the use of the drug is withdrawn, may not the accumulated digitoxin (of the tincture) by absorption give rise to the dangerous symptoms which are called the cumulative effects of digitalis?

The necessity for some agreement in regard to the suggestion made by Mr. England will be apparent. In this connection we observe some contributions to the methods of assaying galenical preparations by MM Altan and Nicolau in the *Buletin Farmaceutic* of Bucharest. There the authors deal with fluid extract and tincture of digitalis, and determine the value entirely by the amount of digitoxin present, the value being reckoned solely upon these results.

Acetic Acid as a Menstruum.

DR. EDWARD R. SQUIBB, of Brooklyn, has collected into one number of the *Ephemeris* three papers which he has recently written in regard to the use of acetic acid as a menstruum in place of ethyl-alcohol. The object of his research was to avoid the use of duty-paid spirit, and to obtain fluid extracts or other preparations equal in efficiency to those made with alcohol, the repercolation process being employed. A 10 per-cent. acetic acid was used in place of U.S.P. alcohol, and the results obtained in the case of nux vomica with acetic acid were better than those with alcohol. In regard to the quality of the products Dr. Squibb says:—

The fluid extracts with both menstrua are very dark brown liquids, the alcoholic one being much the darker, and after six weeks' standing it is very bright and clear, and has a very small grey deposit. That with the acid menstruum is clear and fairly bright and without deposit. It has a very distinctly acid odour, stronger of acid than the other has of alcohol, and it contains about 8.1 per cent. of free acid. The dose of the fluid extract being about 0.18 c.c., or 3 minims, this proportion of free acid in it would not be perceptible, and would be entirely insignificant.

Professor Remington has already suggested that fluid extracts made with acetic acid should be called acettracts, but Dr. Squibb does not favour this idea and points out how advantageous such preparations would be to veterinary surgeons and others who require cheap yet efficient products. He next discusses the use of acetic acid in assaying (it is quite satisfactory), and in the second paper gives results with cinchona similar to those with nux vomica, the repercolation figures dealing with alcoholic and acetic acid menstrua going up to the 33rd fraction, and showing the rate and degree of exhaustion. Dr. Squibb also shows that the 10-per-cent. acetic-acid menstruum is exactly as efficacious in the extraction of cinchona as the U.S.P. menstruum which consists of four volumes of 91 per-cent. alcohol and one volume of glycerin. He finds the acetic menstruum good for assaying cinchona, and does the operation by percolating 10 dr. of powdered cinchona with 10 per-cent. acetic acid (after thirty-six hours' maceration) until between 180 and 200 c.c. of percolate is obtained. This percolate is evaporated to the condition of a soft solid, heated on a water-bath with 30 c.c. of a mixture of 10-per-cent. ammonia one volume and 10-per-cent. alcohol three volumes. When uniform the mixture is poured into a separator, a further 10 c.c. of the ammonia mixture and 10 c.c. of alcohol added, or sufficient ammonia to completely neutralise the acetic acid and set the alkaloids free. The mixture is then extracted with chloroform in the usual way and the alkaloidal residue from the evaporated chloroform is titrated with decinormal alkali as a check on the weighing. Dr. Squibb has, however, found the following a good "short cut" for the pharmacist to use who wishes to approximately determine the amount of alkaloids in a cinchona preparation:—

Ten cubic centimetres of the liquid preparation of the cinchona is shaken in a separator, first with 20 c.c. of the ammonia-alcohol

mixture, and then with 30 to 40 c.c. of chloroform, the liquids separated as in the preceding assay process, which is then followed up to the point of dissolving the chloroform extract in a fresh portion of chloroform in the flask. If the chloroform extract be under 1 gramme, 10 c.c. of fresh chloroform is sufficient for its solution in the flask, and to this is added 10 c.c. of decinormal acid. The flask is vigorously shaken, 10 c.c. of water added, the shaking repeated, and the contents poured into a separator. When separated the chloroform is drawn off into the flask again and the acid solution into a beaker. To the chloroform in the flask 2 c.c. of decinormal acid is added from the burette, well shaken, 5 c.c. water added, the shaking repeated, the whole returned to the separator, the flask rinsed in, and when separated the chloroform is drawn into a small beaker, and the watery solution into the beaker with the first portion. The chloroform should then be bitter-free or be again washed. The watery solution in the beaker is now titrated with decinormal alkali.

The proof which Dr. Squibb brings forward of the utility and reliability of acetic acid as a menstruum is another instance in which science has proved that our forefathers were not wrong in their fondness for vinegar for the same purpose. Professor Remington has worked with stronger acid (up to 40 per cent.), and his results were not so encouraging.

Practical Notes and Formulae.

WASHING-POWDER.

WASHING POWDERS usually consist of partly dried sodium carbonate with a little caustic soda. According to Jolles (*Druggists' Circular*), however, a favourite powder has the following composition:—

Parts			
Sodium carbonate	...	...	68
Sodium thiosulphate	...	...	5
Sodium sulphate	...	...	1

COD-LIVER OIL EMULSIONS.

PROFESSOR H. V. ARNY, before the Ohio Pharmaceutical Association, gave the results of some experiments he has been making with the object of producing a powder which, by shaking in a bottle with the oil, will produce a satisfactory white emulsion. An analysis of a commercial product gave the following result:—

Saccharin	...	...	15 parts
Saponin	...	...	65 "
Powdered tragacanth	...	...	1,000 "

(30 gr. to be used to emulsify each ounce of oil)

As the introduction of saccharin and saponin into an emulsion is questionable, Professor Arny experimented with gelatin, and eventually found the following to yield a good result, using 15 gr. of the powder to an ounce of oil and an ounce of water:—

Gelatin (No. 80 powder)	...	...	10 gr.
Sugar	...	...	20 gr.
Powdered tragacanth	...	...	10 gr.

The gelatin counteracts the yellowish tint of tragacanth emulsions, and yields a product fluid at low temperatures, which scarcely separates at high temperatures.

SPIRIT OF NITROUS ETHER.

PROFESSOR J. FEIL is working out a quick process for the preparation of spirit of nitrous ether, which he thinks will be useful for the retail pharmacist who requires to make small quantities of the preparation rapidly. He places sodium nitrite in a mixture of sulphuric acid and alcohol in a flask, which he connects with an upright condenser, and heats on a water-bath until the action is complete. One experiment gave a 3-per-cent. solution of ethyl nitrite in forty-five minutes. Professor Feil hopes to be able to elaborate the process, so that the disappearance of acid reaction to litmus will show the end of the reaction, and that merely pouring off from the acid sodium sulphate formed will be all the purification required.—[We print this as a sample of research into what has already been worked out.—*ED. C. & D.*]

STORING ESSENTIAL OILS.

MR. FRANK F. EDEL, in the *Spatula*, says he has kept the stock of a wholesale druggist in the following way during

eight years, and has never had a single complaint of the quality of the oils during that period. As soon as oils of orange, lemon, and bergamot are received they are tested with the sense of smell or taste, and, if found perfect, put into small bottles and tightly corked. The bottles are then placed in a dark, cool place, and only one of the bottles opened as wanted.

Dental Notes.

PRESERVATION OF CREOSOTE.

To retain the full strength and medicinal properties of creosote, says the *Dental Digest*, it must be kept in a bottle of white glass, with a glass stopper, and placed where it may receive the light of the sun. If placed in dark bottles and hidden from daylight it deteriorates and loses many desirable qualities.

FOR DENTAL PHARMACISTS.

EXCESS of gum-tissue may be removed with a minimum pain from a tooth-cavity by means of solution of sodium ethylate.

A mixture of taroform and formaldehyde has been used with much success for capping amputated pulps. It is strongly antiseptic, easily applicable, and becomes immediately hard. It is also of good service in pulpitis, but it discolours the teeth.

AMERICAN TOOTH-POWDERS.

THE following formulae, given in the *Bulletin of Pharmacy*, can be adapted to English tastes by making necessary alterations in the flavour:—

Popular Tooth-powder.

Precipitated chalk	...	...	1 lb.
White Castile soap	...	...	1 oz.
Powdered orris-root	...	...	2 oz.
Sugar (or saccharin 2 gr.)	...	...	1 oz.
Oil of wintergreen	...	...	½ oz.

Triturate the oil of wintergreen with part of the chalk, and mix this with the balance of the chalk. Sift each ingredient separately through a sieve (No. 80, or finer), and mix them well together, afterward sifting the mixture five or six times. The finer the sieve, and the more the mixture is sifted, the finer and lighter the powder will be.

Pink Rose-flavoured Tooth-powder.

Precipitated chalk	...	...	1 lb.
Powdered orris-root	...	...	2 oz.
Sugar	...	...	1½ oz.
White Castile soap	...	...	1 oz.
Carmine	...	...	15 gr.
Oil of rose	...	...	12 m.
Oil of cloves	...	...	4 m.

Violet Tooth-powder.

Precipitated chalk	...	...	1 lb.
Powdered orris-root	...	...	4 oz.
Castile soap	...	...	1 oz.
Sugar	...	...	1½ oz.
Extract of violet	...	...	¼ oz.

Green colouring.

Antiseptic Tooth-powder

popular in some localities.

Precipitated chalk	...	...	1 lb.
Castile soap	...	...	5 dr.
Borax	...	...	3 dr.
Thymol	...	...	20 gr.
Menthol	...	...	20 gr.
Eucalyptol	...	...	20 gr.
Oil of wintergreen	...	...	20 gr.
Alcohol	...	...	½ oz.

Dissolve the thymol and oils in the alcohol, and triturate with the chalk.

"My grandpa had a perplexity fit yesterday," said little Bessie to her playmate. "Perplexity fit!" exclaimed the other. "I guess you mean a parallel stroke, don't you?"

The Nauheim Treatment.

THE town of Nauheim, with which the method of treatment known as the "Nauheim system" is associated, stands among the Taunus Hills, in the Duchy of Hesse-Darmstadt, at an altitude of about 400 feet. Although until recently very little known, and a place of comparative insignificance, so far as size and population are concerned (the latter numbering only about 3,000), it may henceforth, owing to the enormous impetus given by the development of the Nauheim system to balneological treatment based upon scientific principles, take rank as the most important of all continental health-resorts. The town itself possesses great natural advantages. These are due, in the first place, to its excellent climate and healthy situation, but principally to the fact of the existence within a small area of a great number and variety of mineral springs having special medicinal virtues. Not only has it valuable thermal and ferruginous springs, but also saline springs having tonic and laxative properties similar to those of the celebrated Elizabethbrunnen at Homburg and of the Rakoczi at Kissingen. The water used for bathing is drawn from two main springs. It contains approximately 3 per cent. sodium chloride, and 0.2 per cent. each calcium chloride and carbonate, and is supersaturated with carbon dioxide. Originally the waters were regarded as possessing no other properties than those common to ordinary saline springs, and although the first bath-house was erected in 1835, the number of bathers was limited. It was not until 1872 that the specific effect of the baths in cases of heart-disease was discovered by the late Professor Bencke. Following upon this discovery, the balneological treatment of various forms of diseased heart was developed by Drs. August and Theodore Schott. The latter of the two brothers now alone survives, and in his hands the system may be said to have been perfected.

The treatment in use at Nauheim consists of Swedish movements and baths. Each of these methods is distinct, and either may be used independently of the other, but they are usually employed in conjunction, either on alternate days or at different periods of the same day. The internal use of the laxative water is frequently combined with a course of baths, but this is not regarded as an essential part of the cure. The movements comprise about thirty in all, and are performed by the patient against an amount of resistance on the part of a trained attendant which is graduated according to the strength and condition of the former. The following is a list of the principal exercises, as given by Dr. Bezly Thorue in his work on "The Schott Methods of Treatment":—

(1) Arms extended in front of body on a level with shoulder, hands meeting, arms carried out till in line, and brought back to original position; (2) arms hanging down, flex at elbow, touch shoulder with fingers; back to original position, one arm at once; (3) arms down, palms forward, arms carried outwards till thumbs meet over head; back to original position; (4) hands in front of abdomen, second phalanges meeting, arms raised till hands rest on top of head; back to original position; (5) arms down, palms against thighs, arms raised in parallel planes; back to original position; (6) trunk flexed on hips; return to original position; (7) trunk rotated to left, to right; return to original position; (8) trunk flexed laterally; (9) as No. 1, but fists clenched; (10) as No. 2, but fists clenched; (11) arms down in turn, palm against thigh, complete revolution from shoulder-joint forwards and upwards until arms vertically raised alongside of ear, palm then turned outward, and arm descends backwards; (12) arms down, moved upwards and backwards in parallel planes as far as possible without bending trunk forwards; return to original position; (13) thighs in turn flexed on trunk, opposite hand resting

on chair; (14) the whole lower extremities extended in turn, are bent forwards to extreme limit of movement, then backwards to the same degree, and then foot brought alongside its fellow, opposite hand on chair; (15) leg in turn flexed on thigh, both hands on chair; (16) the extended lower extremities in turn raised outwards from hip-joint, movement then reversed, opposite hand on chair; (17) the arms, extended horizontally outwards, are rotated from the shoulder-joint to the extreme limits forwards and backwards; (18) the hands in turn are first extended, then flexed on fore-arm to extreme limits and brought into line with arm; (19) the feet in turn are flexed, and extended to extreme limits, and then brought back to natural position.

In administering the baths care is taken to commence with simple saline baths first, the water being allowed to remain in the bath until most of the gas has escaped. After one or two baths have been taken the strength is gradually increased. A day's rest is usually interposed between the stronger baths, the full course of treatment occupying about five weeks.

The attention of the members of the medical profession in this country was drawn to the Nauheim system in 1891, when Dr. Schott read a paper on the subject before the British Medical Congress. He then said that baths similar to those used at Nauheim might be made artificially, and suggested that the treatment might be administered in this country with almost as good effects as attended the use of the natural baths. Since that time the system has been taken up and worked by several leading practitioners in different parts of the country.

The first method adopted for the production of the artificial baths consisted in dissolving the sodium and calcium chlorides in the water. The latter was used at a temperature commencing at about 95° F. for the weaker baths, and gradually dropped to about 85° F. for the stronger. The duration of the baths extended from five minutes for the first up to twenty minutes for the later ones. The carbon dioxide was produced by the action of hydrochloric acid upon sodium bicarbonate.

The following is a list representing the composition of a series of baths in use at one of the largest and best-known hydropathic establishments in the provinces. The quantities given are for a bath of 40 gallons:—

No.	Sodium Chloride	Calcium Chloride	Sodium Bicarbonate	Hydrochloric Acid
1	4 lbs.	6 oz.	None	None
2	5 lbs.	8 oz.	None	None
3	6 lbs.	10 oz.	6 oz.	7 fl. oz.
4	7 lbs.	10 oz.	8 oz.	9 fl. oz.
5	9 lbs.	11 oz.	1 lb.	18½ fl. oz.
6	11 lbs.	12 oz.	1½ lbs.	27½ fl. oz.

Artificial baths prepared from the above formulæ gave very good results in practice, but were attended by certain drawbacks. The principal ones were that the acid was liable to get spilled and to do damage, and in mixing the ingredients the great bulk of the gas came off with a rush as soon as the acid was added, thus tending to weaken the action, and also, unless the room was thoroughly well ventilated, to endanger the health of the patient. These difficulties are now overcome by the employment of the carbonated baths manufactured by Dr. Ernst Saudow, Hamburg. The chemicals are put up in small boxes, containing four 8-oz. packets of sodium bicarbonate and eight tablets of fused sodium bisulphate (acid sulphate) each weighing about 5 oz. The tablets are enclosed in a sheet of thick lead foil. In using the tablets with water the baths resulting approximate fairly in results to that of the saline springs. X

Observations and Reflections.

By XRAYSER.

CARBOLIC ACID.—When are we to hear from the Privy Council in regard to the addition of this substance to the Poison Schedule? Their Lordships are grouse-shooting now, and councillors of the Pharmaceutical Society are also *en vacance* till October, otherwise it might have been urged that, regardless of etiquette, a note pressing for a prompt decision should be sent from Bloomsbury to Whitehall. Meanwhile the humorous practice of supplying the gentle fluid in a bottle labelled "Lime-juice Cordial," as reported last week, may be continued unrebuked.

* * * * *

THE LAW'S DELAY.—A few years ago the lawyers of the High Court got alarmed at the prospect that commercial cases were slipping away from their grasp. It was not that business men were getting less contentious, but that they had come to realise that the legal settlement of their disputes was more grievous to bear than the disputes themselves. Then the lawyers and the courts began to tout for litigants. They promised all sorts of reformation, reduced pleadings, more moderate fees, and prompt judgments. Perhaps it was on the strength of some of these assurances that Mr. Valentine came to England from Virginia to stop what he regarded as an infringement of his rights in his meat-juice. He has been cooling his ardour in lawyers' offices in London for over a year, but the actual hearing of his case commenced in May and concluded in the last week of June. The length of the trial was not perhaps altogether the Court's fault, but it is difficult to apologise for the long postponement of the judgment. Mr. Justice Stirling has had the evidence and the arguments in his mind for two months already, and now the Long Vacation has come, and judgment therefore appears to be deferred till November at least. This is hardly the way to encourage wealthy Americans to come and spend their savings in our law-courts.*

* * * * *

INVOICES AS WARRANTIES.—The President of the Board of Agriculture (Mr. Walter Long) has sent a letter to the Grocers' Federation, replying to the Federation's formal complaint that the principle of giving to invoices the force of statutory warranties had been abandoned in the new Sale of Food and Drugs Bill. Mr. Long is very polite to the Federation, to whom he is "much indebted for many valuable suggestions," and he lays before them the reasons which induced the Government to oppose the concession as regards invoices in carefully-chosen language. It could not have been yielded, he argues, consistently with the aim of promoting honest trading at every stage. Retailers can at present ensure warranties without much difficulty, and decided cases show that an invoice in connection with a running contract is sufficient, if the intention of the wholesale vendor to give a warranty, and the connection of the warranty with the goods in question, are made sufficiently distinct to justify a prosecution and conviction. To assist the retailer more than this would be merely an encouragement to unscrupulous trading. This view is exactly in accord with that which has often been expressed in these pages, and the grocers will be wise to accept it as a final decision. After all, the public have a little claim to consideration, and they can only depend on the good faith and competence of the retailer.

* Mr. Valentine, in calling to bid us good-bye the other day, remarked that he could not wait until the day of judgment.—*Ed. C. & D.*

CO-OPERATIVE DISPENSING.—As a contribution to the discussion concerning dispensing by unqualified assistants, Dr. T. M. Allison, of Newcastle-on-Tyne, suggests in the *British Medical Journal* that the medical practitioners of any district should form a private dispensary, employing a qualified chemist to dispense only. Each member might call there, write his prescriptions in a private locked book with separate key for dispenser, and the medicine could be sent out by a messenger. The expenses of the dispensary would be charged to the associated practitioners in due proportion. From patients whose pecuniary responsibility might be doubtful the fee could be collected at the dispensary and credited. Dr. Allison believes this method would be cheaper, and it would certainly be less burdensome, than dispensing at home, and he politely indicates as one of its recommendations that "the dispensing chemist would occupy his proper position as assistant to, not master of, the profession"; moreover "the prescription would be the private property of the physician, and the public would be saved the danger of self-treatment." The doctor, however, not unreasonably fears that the medical unity essential to such a scheme is not yet attainable. It would scarcely stand the strain of a preliminary discussion. But is there no clever young chemist who could organise an arrangement on the lines suggested for the benefit of a dozen of his medical neighbours and to his own advantage at the same time? It ought not to be impossible to show to probable clients the net cost of such an experiment, and to convince a sufficient number of them that it would be carried out efficiently and in perfect good faith.

* * * * *

COMPANIES AND INDIVIDUALS.—The discussion concerning the relative claims of companies and persons as regards the practice of pharmacy—or, to be strictly accurate, the sale of poisons—would be more useful if the controversialists would take the trouble to get their facts exact. "Auld Reekie," for instance, last week contended that, "surely, what is sauce for arson is sauce for arsenic." He means, of course, the sale of arsenic. The alliteration is pretty, but the argument is faulty. Arson is a criminal offence; the sale of poison and keeping open shop for the sale of poison is an offence the penalty for which is recoverable in a county court, and no Parliament is likely to treat it more seriously. The Act of George IV., c. 28, provides that the word "person" shall include corporate bodies in regard to all offences punishable on indictment or summary conviction. There has never been any doubt about that condition, and it will be seen that on this account companies are as much affected by the 17th section of the Pharmacy Act as individuals. That is to say, if they or their servants insufficiently label poisons when they sell them, they are liable to the penalties. In the ruling case the Court of Queen's Bench, though recognising the distinction between the 15th and the 17th sections of the Act, gave judgment for the Pharmaceutical Society on the ground that the prohibition of other than qualified persons to sell poisons was universal; but the higher Courts reversed this decision, pointing out, what the Queen's Bench Court had apparently overlooked, that this still left it obligatory for a qualified person to actually effect the sale.

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Editorial Comments.

The Bloomsbury Cue.

PRESUMABLY, if we are to be ranked among the faithful, we must believe that the Government has resolved (1) to put down company-pharmacy, and (2) to restrict the dispensing of medicines to registered chemists and druggists. These articles of faith exactly express our ideals—if by “company-pharmacy” is meant that class of traders who regard pills as

a butcher views sausages, and prescriptions as a draper regards a written order for silk and lace—something from which a profit may be made. But we are met with some difficulty as to the foundation of the Bloomsbury belief, and, to vulgarise words used by the First Lord of the Treasury, we must swallow something more important than mere Bloomsbury language of exhortation before we are convinced that the Government of this realm has declared through the voice of its Lord Chancellor that Lord Halsbury's shareholding in Lewis & Burrows (Limited) is a kind of investment that must be declared illegal.

It is exceedingly desirable that the drug-trade should be united before the Pharmaceutical Council meets in October next to lead the way; but there should be a definite object in view, and we seem to be taken further and further away from that by Bloomsbury methods. It is well, while keeping in mind that the drug trade is more concerned about the Pharmacy Act than the Companies Act, not to forget that the latter is a part of the constitution of the country. It exists for the good of the people and the promotion of trade, and the drug-trade, like other trades, finds it advantageous under certain conditions. There is nothing in the principle of the Act antagonistic to the Pharmacy Act, and we do not think it necessary to secure the exclusion of pharmacy from the privileges of the Companies Act. That, however, is exactly what the representatives of the Pharmaceutical Society appear to be endeavouring to drive the trade to seeing that they advocate complete negation of the company principle so far as pharmacy is concerned. We want to conserve the rights of the drug-trade in this matter—viz., that registered chemists may take advantage of the company principle—while securing that unqualified individuals may not by taking advantage of that principle defeat the objects of the Pharmacy Act.

It is, we think, too late in the day to ask Parliament to exclude from the drug-trade companies of unqualified individuals. The Lord Chancellor says so, in effect, and probably his provision for regulating such companies would be made applicable to the future. We think the Lord Chancellor's scheme of qualified managers is quite inadequate, because it is, so far as the public is concerned, no more than is statutory at present, for any company, keeping open shop for the sale of poisons must have in that shop a registered chemist and druggist to effect the sales. That is the law as it is, and it would be ridiculous to re-enact the provision. It may be possible that it is not now carried out as strictly as it should be; but that is a matter entirely in the hands of the Pharmaceutical Council, and we see no reason why the provision should not be strictly enforced.

The Bloomsbury notion that we have suggested a board of qualified directors for supervising poison-sales is a heavy bit of burlesque, indicating a want of grasp of the situation, and some ignorance about existing powers. We have suggested boards of qualified directors because the Pharmaceutical Council did not adopt the "qualification of the owners" idea when we put it forward in 1880. We know that the Council consider it hopeless to try to get the latter principle endorsed by Parliament now; then, we say, let us endeavour to get as good a substitute as possible—something that will prevent individuals who, by failing in their examinations, have proved their incompetence from qualifying through Somerset House. Qualified directors would stop that; restore, in a measure, the qualification of the owner, and ensure for the future that company-promoters will not take up pharmacy in that purely speculative spirit which is imminent to progress in the art of pharmacy and which is a menace to the safety of the public.

An International Pharmacopœia.

THE death of Herr von Waldheim recalls the herculean work which he did in connection with the International Pharmacopœia, the origin and development of which are contemporaneous with the growth of the International Pharmaceutical Congress. It was first brought into the arena of debate at the Congress meeting at Brunswick in 1887 in the form of a wish for uniformity in the formulae for Pharmacopœia galenical preparations. No steps, however, were taken to carry out the object until, at the next Congress in Paris, 1889, a definite proposition was submitted. Two years' later, at the Vienna Congress, little had been done in the matter, and a wish was expressed that it should be pushed on, so at St. Petersburg, in 1874, a manuscript Pharmacopœia was submitted. This manuscript aimed too high, included too much, and was so voluminous that the Congress realised how ambitious and impracticable it had been. Seven years quiet sobered the enthusiasts, and in 1881, when the Congress met in London, the idea of reducing all Pharmacopœias to one was dropped, and the more rational scheme started of equalising the strengths of official pharmacopœial preparations containing potent drugs. Herr von Waldheim took the matter in hand in its new form. In August, 1885, as a contribution to the subject we printed a suggestive sketch of the most reasonable standards for seventy drugs and preparations which it seemed to us desirable to include. At the meeting of the International Congress at Brussels in September of that year Von Waldheim presented a draft of his completed work. Von Waldheim's task in compiling the Pharmacopœia was no light one, and, as we said at the time, "the accomplishment of the task must enhance the esteem which, in conjunction with his coadjutor, Dr. Goddefroi, Austrian pharmacists had already won among their fellow-pharmacists of every nation." The text of the Pharmacopœia occupied twenty pages of the *C. & D.*, and it shows that we had independently recommended standards which the Pharmacopœia Commission considered most necessary. But the Congress still dreaded the reality when it was brought before them, and we have always felt that Von Waldheim's work was far and away ahead of pharmacists' appreciation of it. No enthusiasm was left for International Pharmacopœias, but Pharmacopœia-compilers were careful to remember the principle that the Congress had been aiming at, and we have fruits in the centesimal solutions of the *B. P.* Since 1885 a new generation of pharmacists have come to the front, and they begin to show signs of suffering from the malady which afflicted their predecessors in the sixties and seventies. At Moscow in 1897 Professor Tschirch spoke enthusiastically on the subject before the Medical Congress, and laid down principles not differing materially from those of old. This aroused a feeling at that meeting that the work should be gone on with, and in the following year, at the Vienna International Congress of Chemistry, it was proposed to introduce into all the Pharmacopœias statements of the physical and chemical properties and tests for the purity of the medicine, uniform methods of the preparation of strong remedies, and uniform standards of strength. It was also proposed to incorporate uniform assay methods for surgical dressings, as well as tests for estimating the potency of sero-therapeutic preparations, and the precautions to be taken before such preparations could be recognised as suitable for use in medical practice, besides other things, which showed that the young horses had taken the bit in their mouths. Three months later the subject was brought forward by Dr. Rommelaere at the Brussels Pharmaceutical Congress, and

he proposed "that the Royal Academy of Medicine of Belgium should ask the Government to enter into negotiations with foreign Governments with a view to drawing up an International Pharmacopœia." The Academy was favourably impressed, and, as we have already reported, a committee was appointed to draft another scheme. The report of this committee has recently been published. It goes over the old ground and contains little that is new. Every pharmacist knows by this time that a prescription dispensed in different countries is liable to be compounded in different ways, according to the country in which the patient happens to be in. As proof of this, Professor Herlant has compiled a comparison of the strengths of twenty potent medicines in common use, as formulated in seven Pharmacopœias; but the utility of this comparison is at once discounted by reason that no allowance is made for the fact that in some countries liquids are weighed and in others measured. We showed in 1885 that this makes a considerable difference in the comparisons. Herr von Waldheim's death makes us recur to his services in this work, and when the International Pharmaceutical Congress meets in Paris next year his Pharmacopœia should be reverted to. Then it may be possible to pass a resolution recommending Pharmacopœia authorities of all countries to make their formulas for potent preparations, and the standards for the raw materials, approximate to a series of definite strengths. This is all that is required to bring about the ideals which Von Waldheim and his generation strived after.

Roentgen-ray Progress.

THE novelty of the Roentgen rays has now sufficiently worn off to enable workers to cease playing with the thing and to direct their attention to the advancement of this branch of science. There was good evidence of this in the address to the Roentgen Society by Dr. C. Mansell Moullin, the retiring President, when he made a statement as to the present condition of the medical and surgical applications of radiography. Referring to the injuries, often of a serious character, which follow prolonged exposure to the discharge from a focus-tube, Dr. Mansell Moullin showed that the inquiries of the past year go a long way towards proving that the ultra-violet rays, and not the Roentgen rays, are the cause of the trouble. The violet rays are especially potent in their influence on living tissues, and as they are given off in large quantities from a focus-tube there is every reason to believe that they differ from Roentgen radiations; thus, certain screens cut off the violet rays, but do not interfere with the Roentgen rays. The injurious qualities of the violet rays are now pretty well recognised. Under their influence hairs die and fall out, the nails are affected, and the epidermis destroyed. In the majority of cases which have come under the influence of the rays, no change is perceptible for upwards of three weeks; then slowly cell after cell perishes, and layers of tissue are thrown off, until a stratum is reached sufficiently vital to hold its own and begin the process of repair. There is no evidence that anything in the way of active treatment can stay the progress of the destruction set up by the violet rays, and the recovery is as slow and precarious as from an extensive frost-bite. The thought naturally suggests itself that these rays might be so modified as to make them a valuable therapeutic agent. To a limited extent they have been employed in cases of lupus and eczema, where they have eradicated the diseases leaving scars which were but slightly conspicuous, thus showing that the destruction of the living cells had

been reduced to the smallest limit consistent with repair. Bacteria in artificial cultures can be destroyed by the agency of these ether-waves, but as the power of resistance possessed by the organisms is as great as, or even greater than, that of the living tissues, it is obvious that the application of the violet rays to the treatment of bacillary diseases located near the surface of the body is impracticable; the tissues might be destroyed before the bacteria.

The application of stereoscopy to viewing radiographs, whereby localisation of injuries is directly effected, is a pronounced step in radiographic progress. We alluded to the latest method which Mr. Mackenzie Davidson has recently devised in our report of the Royal Society's *conversazione* a few weeks ago. The Wehnelt break has enabled the time of exposure to be shortened and more brilliant and steady illumination of the tube to be obtained. The perfection of fluorescent screens combined with these improvements has made it possible to localise and reveal aneurysms of the thoracic aorta, interlobar empyemata, mediastinal abscesses, and patches of central pneumonia with great distinctness; indeed, the physician now obtains assistance from the radiographic screen in diagnosis of diseases of the heart and lungs which is far greater than the assistance given by the ophthalmoscope in diagnosing obscure brain-diseases, while in surgical practice the location of bullets is easily determined without the wearisome and painful probing which used to obtain. Diseases of the bones and joints are in like manner made plain; the behaviour of grafts implanted into bony defects can be watched with the same ease as they could be if on the surface of a limb, and the detection of renal calculi is now made tolerably certain. Biliary calculi, however, still elude the radiographer. While doctors have thus been quick to appreciate the advantages of radiography, patients have not been slow to discover that they have in the α rays a means of checking their doctors. It was told in the *Practitioner* a few months ago how risky a matter it is nowadays for a surgeon to unite a fracture, because some patients have pictures of the limbs taken before and after, and, if the bone is not united exactly as it should be, the poor surgeon may be threatened with an action for unskilful treatment. Dr. Mansell Moullin says it is not uncommon for patients to call for consultation armed with radiographs of the affected parts, and not unfrequently they have formed extraordinary impressions and opinions from the pictures. What cranks there are in this world!

Anglo-Swiss Trade.

A HIGHLY interesting and instructive report by Mr. F. R. St. John, British Consul at Berne, on the condition of British trade in Switzerland, has just been published by the Foreign Office. Mr. St. John goes more fully into his subject than is usually the case with consuls, and by means of a series of tables gives readers of all classes details which enable them to see the import of his advice. The report consists of two parts. First, it gives a minute comparison between the British and German imports into Switzerland, which is followed by a more condensed statement and comparison of British and French trade with Switzerland. Both are for 1897, the figures for 1898 not yet being available. In the second part are given suggestions for the development of British trade with Switzerland. As it is rare that an opportunity is presented for ascertaining to what extent we are beaten by Germany in the drug and chemical markets, we have compiled the following table from the reports,

showing the imports into the whole of Switzerland from Great Britain and Germany in 1897:—

	Germany	Great Britain
	£	£
Druggists' sundries—		
Pharmaceutical raw materials	4,777	—
Drugs	10,322	1,789
Alkaloids	17,440	160
Quinine sulphate; refined camphor	17,700	768
Mineral waters	13,674	—
Pharmaceutical preparations—		
Packed for wholesale	10,976	1,248
" retail	2,996	1,624
Perfumes and cosmetics—		
Packed for wholesale	496	—
" retail	3,640	—
Chemicals—		
Colophony, pitch, &c.	5,307	—
Caustic potash, caustic soda, &c.	21,137	2,997
Chloride of lime	3,466	3,190
Hydrochloric acid, crude	14,578	—
Sulphuric acid, crude	12,769	—
Soda, calcined	31,366	—
Acetate and sulphate of aluminium	6,358	—
Sulphates of iron, copper, and zinc	6,060	7,171
Epsom and Glauber salts, chloride of barium, &c.	14,185	826
Aniline oil, &c.	91,048	5,312
Benzine, naphtha, paraffin, purified vaseline, &c.	18,037	286
Arsenic acid, sugar of lead, borax, salts of soda, not described	46,351	2,105
Gallic acid, tannic acid, tannin extracts	3,233	—
Glycerin	6,838	761
Acetic acid, crude	6,234	—
Ferrocyanide of potash, chlorate, and red chromate	2,909	4,008
Oxalic acid, oxalate of potash	1,869	—
Arsenate, bicarbonate, hyposulphite of soda...	853	—
Phthalic acid, resorcin	13,456	—
Potash, carbonate	810	—
Castor oil, sulpho-ricinic acid	671	—
Salicylic acid...	2,138	—
Sal ammoniac, ammonia	5,756	—
Refined nitre...	6,522	—
Nitric acid	2,696	—
Sulphuric ether	3,590	—
Salts of tin	2,282	—
Boraeic, pure carbolic, phosphoric acids, &c.	14,218	1,358
Tartar emetic, cyanide of potash, phosphorus, &c...	2,388	528
Bromine, iodine, carbonate of magnesia, &c.	20,006	8,204
Citric acid, tartaric acid	7,032	2,454
Starch and dextrose, for wholesale	10,316	1,739
" for retail	10,694	518
Purified resin	936	1,573
Alum, carbide of calcium, and various	3,273	3,805
Scientific instruments and apparatus	27,850	1,236
Orthopaedic apparatus and surgical bandages	14,149	990
Microscopes and spectacles	8,886	435
Prepared artificial manure	65,226	—
Raw manure, Chili nitre, waste sulphuric acid	62,123	—

There is no ground for satisfaction to us in these figures. It will be noticed that there are only three British items which exceed the German figures—viz (1) Sulphates of iron, copper, and zinc; (2) ferrocyanide of potash, chlorate, and red chromate; (3) alum, carbide of calcium, and various. It must, of course, be recognised that Germany is more favourably situated than Britain to supply many of the articles at lower prices; this is especially the case with salicylic acid, sugar of lead, borax, aniline oils, &c. But there is no valid reason why the trade in what few articles we excel in should not go on increasing, and some effort ought to be made to remedy the existing state of affairs. In household soap we

appear to have little or no competition, having supplied 18,950*l.* worth against Germany's 2,190*l.* but in perfumed soaps we were beaten by 4,330*l.* worth more obtained from Germany. Here is an opening for us. Glancing at the French figures we find that that country sold Switzerland drugs and chemicals to the value of 152,156*l.* against our 55,226*l.* and 153,472*l.* worth of oils, soaps, and fats, against 33,706*l.* from this country. Mr. St. John points out that "many manufacturers in Great Britain regard Switzerland as a mere cypher—a country in which the whole population amounts to some three million souls. But this small country has a general trade of 71,000,000*l.* showing a greater proportion of exports and imports per head than any other country in the world." He also significantly adds that while France and Germany got 20,000,000*l.* out of Switzerland in 1897 England only took 2,000,000*l.* This fact in itself ought to suggest that we should find it worth while to bestir ourselves, especially as we buy Swiss goods to the annual value of nearly 6,000,000*l.* Mr. St. John concludes his report with an interesting proposition—viz., that to encourage British trade with Switzerland we should establish at Zurich an Anglo-Swiss Chamber of Commerce and sample-depôts under British control. We have no great love for sample-museums looked after by officials who have little special knowledge of the goods which they are made custodians of, nor particular inducement to take orders for, but we have faith in British enterprise, and as Switzerland is a favourite holiday resort perhaps those who would follow Mr. St. John's advice may see for themselves on the spot what they can do to secure some of the orders which are so prolific there.

Bankruptcies in 1898.

THE annual report of the Inspector-General in Bankruptcy for the year 1898, ordered to be printed by the House of Commons immediately prior to the prorogation of Parliament, has now been issued by the Secretary to the Board of Trade. While there is nothing of exceptional importance in it, several sections of the report deal with questions of general interest to chemists and druggists and the trade at large. Last year there were 256 more failures than in 1897, the actual figures, in the aggregate, being 7,282 failures in 1897 and 7,538 in 1898. The total liabilities represented in these, as estimated by the debtors, amounted to 9,659,113*l.* and 10,639,494*l.* respectively, showing an increase on the year 1898 of 980,381*l.* The estimated assets, however, contrary to what might have been expected, showed a marked decrease last year as against those of 1897, the amounts being 4,666,571*l.* in 1897 and 4,586,160*l.* last year. Although the year was distinctly one of commercial prosperity, there was a considerable increase in the number of large insolvencies with unsecured liabilities exceeding 20,000*l.* as compared with the two previous years. The numbers of these for 1896 and 1897 were, respectively, 34 and 32, while 1898 increased to 45. A noticeable feature also is the number of large failures among directors of public companies, the liabilities of which, in 33 cases only, amount to the enormous sum of 1,270,026*l.* The heavy liabilities in this class evoke a reference to the bankruptcy of Mr. E. T. Hooley for nearly 491,000*l.* whose failure is described as the most noteworthy case since the Act of 1883 came into operation.

We gather from the report that only 20 receiving orders were made in the case of chemists and druggists last year, against 25 in 1897, and the total number of failures in our trade decreased from 55, with liabilities amounting to 50,176*l.* in 1897, to 47, with 34,043*l.* liabilities, last year.

This is not a sudden decrease, nor is it an isolated instance of improvement, as the record shows a steady decrease both in the number of chemists who have failed and in the total amount of liabilities involved since the year 1894. Under the heading "Doctors of Medicine, Surgeons, &c," matters are the other way about, and the number of failures in this class last year is exactly double that of 1897, the numbers being respectively 18 and 36, with liabilities estimated at 28,146*l.* and 52,459*l.* for 1897 and 1898.

The number of women who failed last year exceeds by 11 the number who failed in 1897; and, out of a total of 433, all save 36 were engaged in business. The total number of receiving orders and deeds of arrangement in regard to "married women" was 175, "widows" taking a close second place with 174; while "spinsters," who apparently do not take risks as do their more experienced sisters, are third with 84 only. The total liabilities of the 433 failures amongst women was 248,420*l.*, with assets estimated at 93,271*l.* Two lady chemists and druggists failed in 1897; but they are to be congratulated that in 1898 not a single failure amongst them was recorded; indeed, the exceptional prosperity or good fortune of the drug-trade as a whole is strikingly brought out by the Inspector-General's figures. Yet there is room left for a good grumble—our national privilege.

Colonial Bankruptcy Law.

A LUCID summary of bankruptcy legislation and the working of the various ordinances in the British colonies and India is given in the recently issued Board of Trade report under the Bankruptcy Act. Attempts have been made from time to time to assimilate the law of Greater Britain with that of England, and these efforts bring out a considerable variety of methods of applying the principles of home legislation to that of the particular colony or dependency. The British system is followed very closely in the Mauritius, Fiji, Granada, Hong-Kong, Leeward Islands, St Vincent, Gibraltar, Barbados, British Guiana, and the Straits Settlements, although in the four last-mentioned possessions the administration of estates is entirely official. Mauritius has an ordinance in force which only applies to traders, and the far-away Falkland Islands and St. Helena are under the British law "subject to such qualifications as local circumstances render necessary." All the large colonies of Australia, New Zealand, Natal, and the Cape of Good Hope are well provided with Bankruptcy Acts in many respects closely allied to the home law. There are, however, important variations. As an instance, on the question of discharge the South Australian law confers upon the Court extensive powers of imprisonment, and provides some drastic penal provisions; while certain Acts of the bankrupt which in England would only affect the time during which the discharge is withheld, are constituted misdemeanours in this colony, as well as in Western Australia and New Zealand. In New Zealand the public examination is only enforced when the assignee reports or the creditors resolve that an examination is necessary.

In Canada legislation in the direction of a Bankruptcy Act has been proposed on three occasions during the past five years, but up to the present absolutely nothing has been done, and, surprising though it may appear, in the Dominion there is no general law on the subject. Again, there is no active law regarding bankruptcy in British Honduras, the Bahamas, Gold Coast, Lagos, or Bermuda. The inhabitants of the last-named place are certainly not proudly elated in the possession of a real law of their own, as, although legislation based on the English Act of 1869 found its way into

the Statute Book of the island in 1876, it has never been put in operation, for the sufficient reason that "the people of the colony distrust bankruptcy proceedings under the belief that the only result of them is to throw away good money after bad." Indian legislation is regulated by an Imperial Act as regards the cities of Calcutta, Madras, and Bombay, its application being extended to the towns of Rangoon and Moulmein in Burma. Elsewhere in India insolvency proceedings are regulated by the Civil Procedure Act or by special local Acts.

The Board of Trade has no knowledge of the existing state of bankruptcy legislation in other British colonies and possessions. A point in the report worthy of special note is the fact that the Colonial Office, at the instance of the Associated Chambers of Commerce, is in communication with the various colonial Governments to ascertain how far the colonial laws recognise the title of British trustees to property of bankrupts in the colonies, and to urge such alteration in colonial legislation as would entitle British trustees to the same treatment as colonial trustees receive in this country.

The Camphor Monopoly.

WE are able to print to-day a translation of the complete text of the regulations which the Japanese Governor-General of Formosa has promulgated for the regulation of the camphor-industry and export-trade of that island. Briefly, the regulations show that the Government is to buy camphor and camphor oil from manufacturers and sell it to exporters the ports of shipment being Kelung in the north, and Tamsui in the north-west. The adulteration of camphor and camphor oil is prohibited under a fine of 10 yen to 100 yen, and confiscation of the adulterated stuff. The manufacture of camphor and its oil is to be engaged in by those only who are licensed to do so, and full power is reserved to cancel licences, make fresh regulations and punish infringements of those now promulgated. Altogether they are not unreasonable rules, and they should help to conserve the industry.

A correspondent, writing to a Hong-Kong paper, reports that six Government camphor offices have been opened in Formosa. It is the intention of the Government to improve the present method of packing by making the chests of pine instead of camphor wood as hitherto and lining them with zinc, so that the contents can be kept for a long time without loss by evaporation. If all the stills now in use are to be retained they will have a capacity of some 150,000 piculs a year, while the yield is roughly estimated at 40,000 piculs to 50,000 piculs. The Government therefore intends to decrease the number of stills, so as to keep a fair control over the supply, and by adapting it to the demand ensure fair prices. The wisdom of the Government taking the monopoly entirely into its own hands is generally approved in official circles, but owing to the keen opposition to this course from present manufacturers it is considered that a year or two will elapse before the authorities can carry out this plan in its entirety. According to an official announcement, crude camphor of the best quality will be purchased at 30 yen per picul delivered at Taipeh, and already the manufacturers are beginning to complain of the low prices at which they are compelled to sell their produce. They say that if they suffer damage to their factories by flood or raids of savages the low prices will leave them no margin to make good the loss. In a letter from Taipeh appearing in one of the Japanese vernacular papers, the difficulties attending the introduction of the camphor monopoly are strongly commented upon. The anticipated restriction on the output, withdrawal of

manufacturers' licences, and the desire to raise the prices of the commodity have evidently incensed native manufacturers, who now threaten its reversion. A well-known rebel, who recently surrendered to the Japanese authorities, has stated that any interference in the business of his followers will be attended with danger. The official regulations which we print do not reveal any intention of restriction at all, and it is quite possible that when the text of these becomes known the manufacturers' fears may be calmed.

BELGIUM LONGING FOR IT.

In recording the award of the Hanbury medal to Professor Ladenburg, the *Bulletin* of the Brussels Royal Society of Pharmacy hints that it is now Belgium's turn. Perhaps M. Duyk, who is responsible for the *Bulletin*, will suggest a name.

SOLIDIFICATION OF HYDROGEN.

Professor Dewar has succeeded in solidifying hydrogen into a glassy transparent mass.—*Chemical News*.

This achievement is a startling surprise. Professor Dewar has never hinted that he was working towards this consummation of his long research. To those who are acquainted with the nature of his work the magnificence of the result will be apparent. The temperature of liquid hydrogen is -252°C . Professor Dewar's method of solidifying such subtle liquids is to rapidly evaporate them *in vacuo*, the heat for evaporation being derived from the liquids themselves.

CHEMISTS' JURY-SERVICE AND FLATTERY.

The Premier of New Zealand does not encourage the chemists of the colony to expect exemption from jury-service. He says there is so much intelligence amongst chemists that it would be a loss to the colony if their services as jurymen were barred. Is this a stock argument of politicians, we wonder? When the late Mr. John Mackay, Mr. James Robertson, and other Edinburgh pharmacists called on the Lord Advocate of the day to plead for the exemption of Scotch pharmaceutical chemists from jury-service, the wily lawyer used exactly the same argument as the New Zealand Premier.

THE CRITERION FOR LEMON OIL.

Once more the question of the valuation of lemon oil comes to the front through the paper printed on another page, in which the authors advance sound evidence that the genuine oil rarely contains more than 4 per cent. of flavouring-materials, of which the greater part is citral. For some years 7 per cent. of citral, or thereabouts, has been taken as the criterion, but this is so opposed to the experience of competent distillers that the criterion has practically ceased to be valued by them. This was specially apparent in the paper communicated to the recent Pharmaceutical Conference by Mr. T. H. W. Idris, and the London Essence Company's results, following so closely upon Mr. Idris's, and embodying another method of determination, fairly brings us to the definite issue—viz., should the 7-per-cent. citral standard be continued?

ASSISTANTS' HOLIDAYS.

The case decided at Worthing on Monday was not at all satisfactory in its result. A chemist's assistant who had been employed by the Sussex Drug Company for fourteen months without getting a holiday received notice, and thereupon demanded a fortnight's holiday as being the custom of the trade, or a fortnight's salary in lieu thereof. The company declined this, whereupon, after leaving them, he sued for 5*l*. In the County Court his case was not presented with sufficient clearness to convince the Judge, who, however, appeared to be somewhat impatient about the matter.

Although holidays are a matter of contract or agreement when an engagement is entered upon, they are a recognised privilege in the trade. The point which was endeavoured to be established in this case was that it is the custom of the trade to give one day's holiday per month (which is novel to us), that the days may be taken in a lump as an annual holiday, and that if the holiday is not obtained the assistant may get the value of the holiday in money. The last contention was really the ground of the action, and the summary manner in which the Judge treated it shows that there is a vast difference between right and privilege.

THE BOVRIL DISCOUNT.

The Birmingham Grocers' Association has recently had a correspondence with Bovril (Limited) in regard to the supply of bovril to hospitals and similar charitable public institutions. The Birmingham people complain that when tenders for bovril were given out the manufacturers competed with the local merchants, and gave a much larger discount—namely, 20 per cent—so that the company secured the contract themselves. Bovril replied that it was only in a few cases that this had been done, and entirely to encourage the charities. It had been their practice to allow their representatives to supply the bovril at the 20-per-cent. discount-rate to bazaars. The Birmingham Association received a letter from the company to that effect, and in it they also stated that their quotations to public institutions are to be the same as those quoted to the retail trade (which still leaves the retailer no chance in tendering), and they are to take every precaution not to interfere with institutions at present supplied by the trade. The Association did not agree altogether with Bovril (Limited), and resolved that the company be asked to institute a scheme to stop cutting. They thought there was good room for this, as nobody wanted to cut the 2-oz. size of bovril below 1*l*. or 1*l* $\frac{1}{2}$ *d*., and the company might be able to prevent it by giving a larger discount and instituting an anti-cutting scheme.

THE MALARIAL MOSQUITO.

Major Ross, who is in charge of the expedition which has gone out to Sierra Leone to discover the malaria-bearing mosquito, telegraphed on Monday that he had found it there, and he asks the Government to send him out men to assist in the investigation. Major Ross is the member of the Indian Medical Service who has demonstrated that this particular mosquito infects man with malaria. It has long been surmised that there is some connection between mosquitoes and malaria, but it was reserved for Major Ross while in India to establish the fact, and to prove that, although mosquitoes exist which play no part in carrying malaria, there is one species which undoubtedly does. He established his hypothesis by discovering in this species the remains of the malarial parasite, and in a series of papers published in the medical journals, and demonstration, made before the Royal Society, he has traced the life-history of the parasite within the organism of the mosquito from the time that the insect imbibes the parasite to its ejection when the insect bites a person. The object of the Sierra Leone expedition is to study all the conditions under which malaria is induced, and, if possible, to obtain some means whereby the mosquito may be exterminated. The expedition is in a place which is about the deadliest in the world, therefore the best for the purpose.

THE COMPANIES BILL.

Through the courtesy of the Private Secretary of the Lord Chancellor, we have been enabled to obtain a correct version of the speech which his Lordship delivered in the House of Lords on August 3, on the third reading of the Companies Bill. We find that the sentence to which reference was made in an article on page 316 last week should read as follows, without

the italicised words in brackets, which do not occur in the corrected version of the speech:—

It is true to say that, [although a company cannot do it, and that at present] a company cannot be prosecuted for doing it, and a company cannot undergo an examination to enable them to do it, yet if an individual dispenses without qualification you can catch him and prosecute.

In his Lordship's reference to the condition of the law after the House of Lords' decision in 1880 were (in the reporter's MS.) the words, "no company can be formed to do the very thing which an individual is not permitted to do without examination as to qualifications," which in our corrected version read "any company," &c., and this the Lord Chancellor has corrected to "a company," &c. We have observed several other minor differences. Thus, in our report the Lord Chancellor referred to "the medical profession and pharmaceutical chemists," but he has been careful to correct this to make it read "medical men and pharmaceutical chemists." Again in our report he used the relative pronoun "which" in speaking of companies, but in his correction he gives them personality by referring to "those companies who are at present carrying on business as chemists and druggists." It appears that when the Lord Chancellor sat down the Earl of Kimberley followed him. The latter noble Lord remarked "that, not being learned in the law or connected with companies—which was perhaps an advantage"—he held with much modesty such opinions as he had in regard to this extremely complicated and difficult matter. Was Lord Kimberley, we wonder, trying to poke a little fun out of the noble and learned Lord on the woolsack?

THE LONDON CONFERENCE.

London is one of the most difficult places in which to get up anything original in the nature of entertainment for those who attend the Pharmaceutical Conference, and the Western Chemists' Association will need all the help they can get to keep the members together during the three days they will be under their charge. Here is something fresh, which we get from a report of the proceedings of the Pharmaceutical Association of Pennsylvania:—

In the evening an original and most amusing entertainment was given at the Casino on the Steel Pier. Two of its special features were a mock prize-fight by two of the boys gotten up to represent J. H. Redsecker, of Lebanon, and D. E. Bransome, of New Brunswick, N.J. The gloves and fighting were decidedly original, and Mr. Redsecker knocked Mr. Bransome out in six rounds in most approved style. (By the way, it would have done you good to have seen Mr. Redsecker in the audience, laughing at his double on the stage.) The other feature was a capital "take-off" on Mahlon N. Kline and "Eskay's Alburnenised Food." Some of the patients who had been greatly benefited by the food administered by the *pseudo* Mr. Kline suggested, by pantomime, that he try it on his bald pate; when he objected they got him down on the floor, rubbed some of the food into his scalp, when, "presto, change," a fine head of hair appeared.

Mr. Kline will be remembered as the gentleman who visited the Conference two years ago along with Professor Remington. He was President of the Pennsylvania Association this year, and his dignity appears not to have suffered from the take-off above described. There are some very clever entertainers in the Western Association, and they may be able to hit off a few of the leading members in a similar manner. When the time comes, which we take it will be at the beginning of the Winter Session, that a meeting of London chemists is to be called by the Western Association to consider what should be done for the entertainment of Conference visitors, it would be well to keep in mind City men, especially wholesalers. We fancy that the surest way to get them to attend in force would be to hold a meeting one day after 'Change—say, about 4 P.M.—in Cannon Street Hotel.

METROPOLITAN GOVERNMENT.

From the annual report of the Chief Officer of the Public Control Department of the London County Council, it

appears that 7,479 inquests were held in London during the year 1898. The average cost of each inquest was 2*l.* 10*s.* 10*d.* There are thirteen coroners' districts and ten coroners, some of the minor districts being grouped. Dr. Danford Thomas heads the list in regard to the number of inquests (1,616), as well as in income, 2,263*l.* 1*s.* 4*d.*; Mr. Wynne E. Baxter held 1,357 inquests, and his income was 1,952*l.* 16*s.*; Mr. Wynn Westcott held 1,090 inquests, and his income amounted to 1,150*l.*; whilst Mr. A. Braxton Hicks held 740 inquests, and drew 1,043*l.* 2*s.* salary. Weights, measures, and weighing-machines to the number of 1,929,936 have been verified and stamped, and for this work fees to the amount of 4,751*l.* 16*s.* 5*d.* were received. In regard to the metric system, some delay has occurred at the Standards Department in defining the pattern of liquid-standards, hence the equipment is not yet completed, and, moreover, a further difficulty arises from the fact that the only fees that may be taken for verifying weights and measures are those prescribed by order in Council, and no order has yet been made applicable to the metric system. The report states, however, that there has been little indication of a desire to adopt the metric system. The action of the Council in regard to the sale of coal is well known, but it appears that the Act containing the provisions regulating the sale of coal does not extend to the sale of coke. There is, however, an old Act which can be made operative. The report states, however, it is questionable whether the requirement to sell coke by weight would be to the interest of purchasers, as unscrupulous dealers might develop the habit of watering coke. The Council took proceedings in 230 cases of infringement of the Shop Hours Acts, and obtained convictions in 211 cases. Seventy-two licences for keeping carbide of calcium were granted during the year, and the Council influenced the Society of Arts to examine acetylene-gas apparatus and promote the acetylene exhibition at the Imperial Institute. Several fires were reported from petroleum-spirit, chiefly while it was being used for cleaning clothes. One case was thought to have originated by the ignition of the vapour from an electric spark generated by the friction set up in the cleaning. There have been 832 cases of glanders in animals during the year; 107 cases were disclosed by the aid of mallein injection. The post-mortem examination of these cases, diagnosed solely by means of injection of mallein, proved conclusively the correctness of the diagnosis. There have been also two fatal cases of glanders in man reported during the year, the victims in both cases being Carmen.

EDIBLE COTTONSEED OIL.

In an article in a recent issue of the *Lancet* the claims of cottonseed oil as a useful food and a substitute for more familiar fats are discussed. The late Dr. Campbell Morfit paid considerable attention to the purity of cottonseed oil for edible and pharmaceutical purposes, and in a paper communicated by his daughter containing observations connected with his researches on this subject it is stated that the exceptional capacity of assimilation which chemically pure cottonseed oil possesses could be demonstrated by five years' experience of its use in severe chronic dyspepsia. The stomach, though intolerant of every other fat, even of butter, retained daily a small quantity of cottonseed oil with nourishing results unobtainable from any other food. Further cottonseed oil is much less nauseous than cod-liver oil, and is free from laxative tendencies, so that it may be used in the case of tuberculous patients where excessive waste is to be combated without overtaxing the digestive functions. It has also been suggested as a suitable food for growing children and as a lubricant in massage-treatment. If in bleaching cottonseed oil such refining-agents are used as will act upon the impurities alone, leaving the oil itself

chemically untouched, a bright golden oil is obtained possessing a sweet nutty flavour and evincing no sign of becoming rancid. Such an oil is well adapted to edible and culinary purposes.

THE FAHRENHEIT THERMOMETER.

Mr. J. Y. Buchanan, F.R.S., who acted as chemist to the *Challenger* expedition, writes to *Nature* in defence of the Fahrenheit thermometer for meteorological purposes. He claims that the Celsius thermometer is decidedly disadvantageous, and that every meteorologist in northern countries who makes use of temperatures expressed in Fahrenheit degrees can discuss them at much less expense in labour and money than when Celsius degrees are employed, and it is only because it is the fashion that they use the Celsius. He points out that

Fahrenheit lived and died before the decimal cult or the worship of the number ten and its multiples came into vogue; but, whether in obedience to the prophetic instinct of great minds or not, it almost seems as if he had foreseen and was concerned to provide for the weaknesses of those that were to come after him. The reformers of weights and measures during the French revolution rejected every practical consideration, and chose the new fundamental unit, the metre, of the length that it is, because they believed it to be an exact decimal fraction one ten-millionth of the length of the meridian from the pole to the equator. Is it an accident that mercury, which was first used by Fahrenheit for filling thermometers, expands by almost exactly one ten-thousandth of its volume for one Fahrenheit's degree?

Mr. Buchanan's outspoken protest is somewhat refreshing in these days when Fahrenheit temperature is considered to be as unscientific as it is—convenient.

A LAY VIEW OF THE ADDENDUM.

The letter sent by Mr. Chamberlain to the Ceylon Branch of the British Medical Council, asking for information regarding desirable native drugs for inclusion in an Imperial Pharmacopœia (see *C. & D.*, August 12, page 283), and the recommendations of Dr. van Dort in connection therewith, are creating a lively interest in the East. Dr. van Dort is a Dutch-Eurasian medical man of eminence in Colombo, and apparently knows his subject, but the Indian papers are finding fault with him for recommending only a paltry three, and leaving out three dozen other remedies quite as valuable. The first of the favoured three, *Trasthavu*, is the *Ipomea Turbethum*, used as a substitute for jalap; *Neeramnile* (Sinhalese-Katu-Ikiri) is *Hygrophila spindsa*, and *Adhatoda vasica*, or *wanepala*, is the Tamil *Adhatoda Pavatha* or "plants that the goats avoid." These plants, remarks the *Ceylon Observer*, are among the least important of the drugs considered useful by the Vedalaras, and the committee appointed to report on the subject could not do better than enlist the aid of a few Vedalaras of recognised ability to help them. Hitherto the tendency has been, among those who practise Western methods, to pooh-pooh the possibility of any good being found in native systems of medicine, but the *Observer* points out that Eastern systems of medicine are not such delusions as those who know nothing about them are apt to imagine. Therefore it is desirable, for the sake of suffering humanity, that more attention should be devoted to the Sinhalese and Tamil systems of medicine, and it is hoped that the Ceylon Branch of the British Medical Association will not rest satisfied with an examination of the value of native drugs, but will investigate more extensively the whole field of Eastern medicine.

Count Rumford.

COUNT RUMFORD, the founder of the Royal Institution of London, is buried in the Auteuil Cemetery. Passing by this quiet spot the other day I inquired of the uniformed gatekeeper, in my best French (writes an English pharmacist), "Can you direct me to Count Rumford's tomb?" Perhaps it was my accent, but he did not catch the name.

A second and older man came up. "Look through the alphabetical register," he suggested; "all the names are there." We did so, and duly discovered the inscription, "Plot 5, line 7, No. 18." I was directed, "Under the elms in yonder corner. You can't mistake it; it's the only grave in the plot that we are paid to keep in repair." "Ah, some relation or descendant, no doubt?" "I don't recollect, but someone comes every year with flowers." I crossed to the spot indicated, where the tombs date from the opening of the cemetery, a century or so ago. Most of the headstones in this locality are cracking and falling, and the dead they cover are mostly forgotten. The one exception was the object of my search, a modest but well-kept tomb, the appearance of which may be judged from the sketch. The inscriptions (all in French) read as follows:—

To the memory of Benjamin Thompson, Count Rumford, born in 1753 at Concord, near Boston, in America, died the 21st August, 1814, at Auteuil. A celebrated physicist and an enlightened philanthropist, his discoveries in light and heat have rendered his name illustrious, and his efforts to ameliorate the lot of the poor will make it ever cherished by the friends of humanity.

This was on the upright headstone in faint incised letters. Below is a more legible and newer-looking marble slab, stating—

This monument, destroyed by a shell during the Commune in March, 1871, was restored in March, 1876, at the expense of the American Academy of Arts and Sciences of the College of Harvard, at Cambridge, Massachusetts, U.S.A.

Finally, the horizontal stone enumerates Rumford's European honours—

In Bavaria, Lieut.-General, Chief of Headquarters Staff (État-Major Général), State Councillor, and Minister of War.

In France, Member of the Institute (Academy of Sciences).

It was mainly on account of Mme. Lavoisier, the widow of the great chemist, that Rumford made his home in Paris, though he had frequently visited the French capital in the course of his strange and roving life. He probably made her acquaintance about 1801 or 1802, and in 1803 went with her for a tour in Switzerland. When they married, in September, 1805, Rumford was 52, and the widow 47. Both were of superior intelligence and good position, and it might be thought that their long previous acquaintance would have enabled them to judge each other's character. The unhappiness of the union was doubtless caused by the fact that Mme. Lavoisier (first married at 14) had been a widow for eleven years, whereas Rumford had been separated from his first wife (through his exile from America) eighteen years before her death. In fact, one of the romantic features of his career was the visit to Munich of his 23-year-old daughter, whom he had never seen. Be the reasons what they may, Rumford's household in the rue d'Anjou-St.-Honoré* was a living illustration of the pettinesses to which two great but self-willed minds can descend. Mme. Lavoisier refused to drop the name of her first husband, and Rumford locked the garden-gate on his wife's "at home" day. Madame retaliated by watering his favourite flowers with boiling water. Assuming that these were specimens of their daily amenities, it is clear that separation was inevitable. They parted by mutual consent in 1809. Mme. Lavoisier died in 1836, at the age of 78. There is not much record of her, though for many years her house was frequented by savants. M. Berthelot says he "never knew Mme. Lavoisier, but he has met several of her contemporaries." "Right up to their extreme old age," he says, "these women of the eighteenth century had a very original physiognomy, a mixture of the sensibility, ardour, and frivolity, the devotion to humanity and to philosophy, which characterise their epoch."

* This house was demolished in 1841, and the two streets then built were named the rue Lavoisier and the rue Rumford. This latter street disappeared entirely when the boulevard Haussmann was constructed, but the rue Lavoisier still exists close by the Louis XVI. "Expiatory Chapel," well known to tourists.



Oil of Lemon.

WHAT PERCENTAGE OF CITRAL DOES IT CONTAIN?

A communication from the research laboratory of the London Essence Company.

IT is generally stated that genuine oil of lemon should contain from 7 to 7.5 per cent. of citral. This statement may be found in most text-books and published works on the subject.

By citral we presume is meant an aldehyde having a formula $C_9H_{16}COH$, and in what follows we mean by citral the total aldehydic constituents of the oil, consisting, as other workers have shown, of citral (otherwise geranal) and a small percentage of citronellic aldehyde. Does oil of lemon contain 7 to 7.5 per cent. of these bodies? We are strongly of opinion that the question is open to much doubt, for the following reasons:—

1. The sodium bisulphite method of estimating the amount of aldehydes does not give a number approaching 7 per cent.

2. It is impossible to obtain, even in the laboratory, 7 per cent. of total flavouring-portion by careful fractional distillation.

3. Makers of terpeneless and concentrated oil of lemon only obtain 4 to 5 per cent. of total flavouring-matter, of which only a portion is of an aldehydic nature.

4. The refractive index does not indicate so high a percentage of aldehydes.

Dealing with these reasons in their order, we observe that we have made many experiments with the sodium-bisulphite method to ascertain with what degree of accuracy it may be used, and we find that with care and the usual precautions we are able to obtain very concordant results by it.

Some artificial oils made by Mr. A. C. Chapman, F.I.C., F.C.S., show this to be the case. The terpenes used for making these artificial oils were carefully prepared by fractional distillation from lemon oil, and redistilled over sodium under reduced pressure. The terpenes so prepared gave no absorption with sodium bisulphite. To these terpenes were added 5, 7, and 10 per cent. of citral, and the mixtures were analysed by the sodium-bisulphite method, with the following results:—Citral added, 5 per cent.: citral found, 4.8, 4.9, and 5 per cent.; citral added, 7 per cent.: citral found, 6.8, 6.4, and 7.2 per cent.; citral added, 10 per cent.: citral found, 9.2, 9.2, 9.3, 10, and 10.4 per cent.

These concordant analyses show what degree of accuracy the process is capable of. These results were obtained by Mr. Chapman working quite independently. We ourselves have made confirmatory experiments, and the following are the mean of seven analyses:—

	Citral added	Citral found
1. ...	6.6 per cent.	6.3 per cent.
2. ...	7.3 "	7 "

Having thus established the substantial accuracy of the bisulphite method, we applied it to specimens of lemon oil whose genuineness was beyond question, and we found them to contain 3 to 4 per cent. citral. In no oil that we have examined have we found more than 4 per cent. of citral.

We have fractionally distilled many samples of what we believe to be pure lemon oil, using 1,000 c.c. in each experiment, and in no case have we been able to find more than 5 per cent. of total flavouring-matter—i.e., from 3 to 4 per cent. of aldehyde.

We may here quote a portion of a report received from Mr. Chapman, which has a direct bearing on this point. The

oil mentioned by Mr. Chapman was the same as sent to two other analysts, whose reports are mentioned later.

As a further confirmation the following experiment may be described:—

Eleven hundred cubic centimetres of the oil was submitted to fractional distillation, under reduced pressure, from an oil-bath. Three fractions were obtained, the lowest (950 c.c.) consisting of hydrocarbons, the second consisting of the same hydrocarbons mixed with citral, and the third consisting chiefly of impure citral. Only 15 c.c., or 1.3 per cent., of the oil taken remained in the distilling-flask as a nearly solid resinous mass, which was proved to contain only traces of citral.

Estimations of the percentage of citral in the lowest hydrocarbon fraction showed that it amounted to approximately 1 per cent. of the oil. The two remaining fractions were then mixed, and made up to a definite volume with pure lemon-oil hydrocarbons. Three determinations of citral in this gave, as the average, 2.6 per cent. If to this the 1 per cent. above referred to is added, and, say, 0.4 per cent. for slight and unavoidable loss, it makes the proportion of citral in the oil 4.0 per cent.

We can confirm the results obtained by other makers of concentrated (terpeneless) oil of lemon. Mr. Haensel, the original maker, says that he only obtains 3 to 4 per cent. of total flavouring-matter. Idris, in his "Notes on Essential Oils," gives 4 to 6 per cent. We have distilled large quantities ourselves (as much as 1,000 lbs. at a time), and have never been able to obtain from the oil more than 5 per cent. of flavouring-matter, and only a portion of this is of an aldehydic nature. Thus, practical experience shows that oil of lemon does not contain such a large percentage of citral as is usually asserted.

We have made a great number of determinations of the refractive indices of oil of lemon from various makers, and have found that the index of a pure oil varies within well-defined and narrow limits. The results support our opinion that none of these samples of natural oils contained a higher percentage of flavouring-material than is indicated by the bisulphite method, as we find that the refractive index bears a direct relation to the amount of flavouring-material present. We are continuing our researches in this direction, and are endeavouring to determine the exact relation existing between the flavouring and the non-flavouring constituents of oil of lemon, and so to obtain one more reliable factor to go upon in the valuation of this and similar oils.

Recently we submitted a sample of oil of lemon to three well-known analysts (two of whom are credited with being specialists in this department), asking them to examine the oil and report on the percentage of citral contained therein. No. 1 reported that it contained 7.3 per cent., No. 2 found 6.6 per cent., and No. 3 reported 4.0 per cent.

We wrote to Nos. 1 and 2, asking them if they would favour us with their methods of analysis, as our results did not agree with theirs. One firm replied that it was against their practice to disclose their analytical methods, and the other "that their method was a manufacturing one that they were not at liberty to disclose." Under the circumstances, we think it regrettable that these analysts did not see their way to give us the information, and so enable us to discuss the question with them.

We feel that in analytical chemistry there should be no secret methods, and that it is very difficult to place any confidence in scientific results which cannot be discussed and criticised. At all events, we think it is a matter of commercial importance, as well as scientific interest, that analysts who report higher content of citral in lemon oils than can be got out of them by known methods—the details of which are open to criticism—should state the equivalent of citral found by the non-secret methods.

Unless the 6.6 and 7.3 per cents. quoted above are the

result of methods invariably giving high results, or the figures obtained are multiplied by a factor to bring them up to the popular notion of the percentage of citral in lemon oil, we cannot understand how so high a percentage can be found, unless the total flavouring-matter is returned as "citral," which is, of course, unjustifiable. Even then, as we have shown, these percentages are too high.

We think that it is, commercially, most important that the percentage of aldehydes in lemon oil should be accurately determined, as undoubtedly this factor is a good criterion of the value of lemon oil.

Now that such large quantities of terpeneless oils are being made, it is necessary to guard against the addition of citral, made from lemongrass oil, to the terpenes which are obtained in large quantities as a by-product in the manufacture of these oils, and which can thus easily be made to show a high citral percentage. Such adulteration is known to exist, and we believe it may be best detected by a careful examination of the physical properties of the higher-boiling, or flavouring, portion of the oil.

"I Have Passed."

[A true incident.]

I HAD seen the wistful gloowering
Of an anxious candidate,
And watched his countenance lowering
As he learnt his awful fate.
He departed sad and weary,
At me mournfully he glanced.
Then my name was called out clearly ;
To the Chairman I advanced,
And with dubious smile he asked me,
" Well, now, what do you expect ?"
And he gave a look which tasked me
How to answer with respect.
Though my tongue was well-nigh voiceless,
And my heart did palpitate
In a manner, to him, noiseless,
Yet my mind did meditate
(As I'd answered most correctly)
On this question rather tough—
I perceived quite indirectly
That his little game was bluff.
Then with twinkling eye he told me
That my fortunate lot was cast
With the candidates successful.
Now I'm happy ! I have passed !

GALEN PLACE. (29, 99.)

The New Manager.

The *Manchester Guardian* says: "It was recently rumoured that Lord Halsbury, the Lord Chancellor, is retiring." Messrs. Lewis & Burrows are opening a branch at Lavender Hill, Clapham Junction.—*C. & D.*, August 19, page 335.

THESE paragraphs twain, they bewilder my brain
By their sinister juxtaposition,
For 'tis evident quite that we'll see a fine sight
When his Lordship has changed his condition.
The post of Lord Chancellor irksome he finds—
'Tis ploughing of sand into furrows;
So that office unkindly he forthwith resigns :
Is he going to Lewis & Burrows ?
The Companies Bill, that insoluble pill
At which pharmacists gibber so rudely,
Which they gaily transfix with their paltry pinpricks,
Does not seem in a state that is goodly.
But 'tis wrongful for envy or malice to bear,
And he'll share in our joys and our sorrows
When he takes up the pharmacists' burdens and cares
In a branch store of Lewis & Burrows.

RUSTI-SCOTTUS.

Advertising Ideas.

A REAL MERMAID.

Messrs. A. & F. Pears (Limited) have one in their window in New Oxford Street. The specimen is stuffed, and alongside it is a picture of an ideal mermaid, one of those beautiful ladies with expansive bosom and fishy tails familiar to all of us. The real thing is a horrible-looking monster about 7 feet high, with a head like a turnip and very nondescript-looking body, totally destitute of any resemblance to the female form divine. It is a good advertisement for Pears' soap, and is drawing big crowds just now.

TWO WINDOW-DISPLAYS.

Hair tonic Display.—The rear of the window is filled with rocks piled cone-shaped ; at the top cotton is laid, and Epsom salts sprinkled over this to give the effect of a snow-capped mountain. Tinsel is then arranged so as to represent a waterfall dropping into a miniature lake, the lake being represented by a mirror placed at the base of the mountain. Ferns and other plants are so placed as to seem growing along the margin of the lake. The floor is covered with sods to give a pastoral appearance. Near the centre is placed a hollow log ; at one end of this is a Brownie holding in his hand a gun, and a dog is just entering the hollow as if in pursuit of game. At the other end of the log a hare is coming out, but is prevented from escaping by a second Brownie, who is holding in his hand a bottle of hair-tonic, which he holds against the hare. A placard just above this Brownie's head makes him say, "Faith, and this kipes the 'hair' from comin' out."

Mosquito lotion—The window is furnished as a nursery, and divided into two apartments by a row of mosquito-lotion bottles. On one side is a doll-cradle with a doll in it, with eyes closed as if sleeping sweetly. Artificial roses are placed around the doll, and a bottle of mosquito-lotion placed near its head, to give this side of the window the air of a well-kept home. On a card over the cradle are these words, "Katy Did." On the opposite side of the window a doll is placed in a cradle, with hands and feet in the air, looking as wretched as possible ; broken nursing-bottles and toys are scattered around ; a large mosquito is on the doll's forehead, biting it so fiercely that streaks of blood (carmine) are running down its face. On a card above its head is written "Katy Didn't." Between and above the two dolls in the centre is a card on which is written, "Use R—'s Mosquito-lotion."—*Bulletin of Pharmacy*.

HOW IT STRIKES THE BENGALI.

Our language, as we use it in England, is all too prosaic when we tell the public what our hair-restorers can do. There is a Bengali firm in Calcutta who have a hair-speciality which they advertise in a splendid handbook wherein the excellencies of their "worthy physician" are set forth as a preliminary of the merits of the hair-restorer :—

What (they ask) is more fascinating and beautifying on human being than a well-kept head of hair ? The poets have sung, in all ages and in all climes, the power which "fair tresses" have, in captivating "man's imperial mind." The personal attractions of either sex begin to manifest themselves in the luxuriant growth of hair. Every gaze is turned to where a perfect shower of soft, silky, and rich black hair, with lustrous gloss upon it, worn in bands and let fall on either side of a lovely countenance, descends upon well-formed shoulders and upon a neck pure and stainless. No face, however charmingly chiselled, ravishes a heart when the head is not blessed with that supreme ornament of Nature. It is hair that is highly prized by the ladies in India, and, we believe, it is not less prized by every other human being on Earth. Not a hair is dislodged but with a pang from the head of her who is gifted with beauty, the first of blessings divinely bestowed on Man. No husband can spare his purse in redeeming the natural gloss, softness, and abundance of the hair of his loving and devoted wife. No fond father can suffer himself to see her daughter's head getting divested of this one ornament, which art can scarcely replace. What a pity it is to witness the hair becoming thin, fading or turning prematurely grey ! Not only is hair ever dear to the females, it is highly valued by the males as well.

And so they go on through paths of style which we were brought up to believe belong to the *Family Herald*. It may be worth trying on an unsophisticated English public.

Correspondence.

Notice to Correspondents. In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

What is Onycha?

SIR,—Webster says onycha is "the shell of a species of mussel, found in the lakes of India which, when burned, emits a musky odour." Sir Wm. Smith's "Dictionary of the Bible" says it is the operculum of some species of *Strombus*, a genus of gasteropodous mollusca. No doubt it is the ὄνυξ of Dioscorides and onyx of Pliny.

Victoria Park Gate, E.,
August 19.

E. BEEDOE, M.R.C.S.

SIR,—The correspondent who asks for information concerning the botanical source of this "spice," mentioned in Exodus xxx. 34 as one of the ingredients in the sacred perfume, will find a note concerning the substance in Smith's "Dictionary of the Bible," but he will not be able to ascertain its botanical source, for the sufficient reason that it has none. Onycha was the shell or operculum of a kind of mussel, probably *Strombus lentiginosus*, the best kind of which, according to Dioscorides, came from the shores of the Red Sea. The shell when burnt gave forth a musky odour. Dioscorides and Pliny both refer to it. The former says it has "a sweet odour when burnt something like castoreum." Onyx (of which onycha is the accusative) is referred to again in Ecclesiastes xxiv. 15, where wisdom is compared to the pleasant odour yielded by "galbanum, onyx, and sweet storax." The same substance is supposed to be referred to in old works on *materia medica* under the names *unguis odoratus*, *blatta byzantina*, and *devil's claw*. It may be mentioned that the American edition of Smith's "Dictionary" contains a footnote giving information in regard to the article contributed by Mr. Daniel Hanbury.

PERCY VERE.

SIR,—In reply to Mr. Clarke's question, it may be somewhat difficult to give the botanical source of "onycha," Exod. xxx. 34, since it is said to be "the shield or operculum of many kinds of shellfish burnt to form an ingredient in frankincense, as it has a strong pungent smell." See "Aids to the Student, &c." (Eyre & Spottiswoode), Dr. Adam Clarke's commentary, &c.

Ryde, August 19.

HENRY H. POLLARD.

SIR,—Your correspondent, Mr. Clarke, asks a question which will not be answered by searching the vegetable kingdom: it will be from the animal realm. It is the operculum of a species of sea-snails, *blatta byzantina*. See Smith's "Dictionary of the Bible," confirmed by a note from Mr. D. Hanbury therein.

East Dulwich, August 19.

G. E. BURT.

SIR,—Onycha consists of the horny operculum of various species of the mollusc tribe; *Strombus*, *Murex*, *Purpura*, are some of its accredited sources. It is variously referred to, as—

1. Onycha:—

"Take unto thee sweet spiccs, stacte, and onycha and galbanum, with pure frankincense."—Exod. xxx. 34.

2. Onyx:—

"Spread about a pleasant odour, as galbanum and onyx and stacte, and as the fume of frankincense."—Ecclesiastes xxiv. 16.

3. Ongle odorant (unguis odoratus, "sweet hoof"):—

"Prends des aromates, du stacte, de l'ongle odorant, du galbanum et de l'encens pur."—Exod. xxx. 34 (French Bible).

4. Blatta Byzantia:—

"Le Blatta Byzantia ou ongle odorant, est le couvercle d'une coquille. Pour la figure elle ressemble aux griffes de quelques

animaux. Dioscoride appelle ce couvercle *onguis sive onix*. On brûloit de son temps l'un et l'autre pour les vapeurs à cause, dit il, que cette odeur approchait de celle du castoreum."—Pomet's "Histoire des Drogues," lili, 107.

The Greek name, ὄνυξ, signifies nail or claw, and has reference to the appearance of the dried operculum. This is well shown in an illustration on page 97 of the work just quoted. Dioscorides has a curious theory as to the origin of the fragrant properties of onycha. He says the mollusc which produces it "resembles the purpura, and is found in India, in the nard-producing lakes; it is odorous, because the shellfish feed on the nard." In addition to its use as a perfume, it was much esteemed by the old authors as a remedial agent. Thus Culpeper—

"Blatta Byzantia, being beaten into powder and snuffed up into the nose, helps the fits of the mother and such as have the falling sickness."—"School of Physick," page 275.

Gray's "Supplement" says it is "Hepatic and antiepileptic. Dose of the powder, 5ss. to 3j." Pliny, in a chapter on "Medicines Taken from Living Creatures of the Sea," says:—

"The callositie or thick skin wherewith the Purple fishes cover their heads and hollow concavities, if it be pruned and applied unto wounded sinews, doth consolidat and sowder them again, even though they were cut asunder."

"I read in some writers of that which they call *ostracium* to be the same that others name *onyx*; but, call it what you will, a suffumigation made thereof is of wonderful effect to ease the pain and grieve of the matrice. I find that it hath the smell of castoreum, and if it be burnt together therewith, in a perfume, the more good will ensue."—Holland's translation, xxxii. 10.

Brighton, August 21.

C. S. ASHTON.

SIR,—Replying to Mr. Clarke's query re "onycha," I find in my Prayer-book that Mendelssohn, in his commentaries on Exodus xxx. 34, describes it as "onycha or cloves."

Yours, &c.,

Upper Norwood, August 21.

J. ELEVIN.

SIR,—I am able to inform Mr. R. T. Clarke that "onycha" used in incense, is a picked variety of Siam benzoin, so-called from the resemblance which the fine white tears bear to the onyx (ὄνυξ), or half-moon in the thumbnail. It is used to-day in the incense of most churches.

Yours faithfully,

Wolverhampton, Augst 23.

E. H. MARPLEW.

SIR,—The meaning of this word is unknown, and if, as I understand, it occurs nowhere but in Exodus xxx. 34, it is likely to remain unknown. Many have thought it means laudanum; others take it to be the name of a deposit of a shellfish of the *Strombidae*. Bdellium has also been mentioned, and onyx (= onycha); but where we have no positive knowledge conjecture is idle.

Yours, &c.,

Epworth, August 21.

C. O. BELL.

SIR,—In answer to your correspondent's (Mr. R. T. Clarke) inquiry as to the botanical source of "onycha," one of the sweet spices mentioned in Exodus xxx. 34, I have been able to obtain the following information from a friend who has made a special study of the Hebrew and Chaldeic Commentaries on the Testament:—"Onycha," Hebrew "Shechilas, שְׁחִילָה, was not derived from a botanical but from an animal source. It was the cartilage or shell of a species of mussel found both in the Indian Ocean and the Red Sea. It is mentioned by Oken ('Paturgeschichte,' vol. i., page 484 et seq.) as being called 'Onyx marinus,' and is still used as a perfume in the East ('Forskal,' page 143). This statement is confirmed by such authorities as Maimonides and other eminent Rabbinical writers, and also by the late Dr. N. Adler."

Yours faithfully,

HERBERT HYMANS.

Normanhurst, Priory Road, Hampstead, N.W.,

August 22.

SIR,—Writers on rubric tell us that when preparing incense we should follow as far as possible the biblical formula, but there is a lamentable lack of instruction as to how this may be done.

Some years ago I was asked to provide a church incense of the very finest quality, and I endeavoured to elucidate and recognise the aromatics detailed in the Levitical recipe

Information on the subject is difficult to obtain, as each authority refers you to some other one; but when at last I had compounded an incense as faithfully as I could follow the rule, the result was disappointing—at least to the orthodox nineteenth-century nose. The odour was somewhat too alliaceous, the proportion of galbanum being apparently too great, and the odour by no means as sanctiferous as that which one obtains from an incense made according to the more usual formula of the present day. Onycha, we are told, is the celebrated odiferous shell of the ancients (in Hebrew, *Sheleth*), the operculum or "nail" of a species of *Strombus* or wing shell formerly well known in Europe under the name of *Blatta byzantina*, and still imported into Bombay for use in making incense.

Although this is the common account of onycha, I believe it is altogether wrong. It is almost certain that the Hebrews did not use any kind of *Blatta* in preparing incense; such things were generally accounted unclean and unfit for the purpose, and their use is probably confined to Indian rites. An aromatic gum was probably used, and one "shining like a nail"—hence most likely good almond benzoin. Benzoin is used in the Greek churches to a great extent, and enters largely into the composition of the incense used to-day in India. Certainly if it be not the *Sheleth* of the Hebrews, it will make a more tolerable substitute for it than anything we know of. Olibanum, pure and simple, is said to be used in Rome as incense, but in *partibus infidelium* known as Great Britain and Ireland it is mostly mixed with benzoin and cascarilla, as the mixture gives a more voluminous cloud when placed in the censer. The antiseptic qualities of incense seem to have been known from an early date. Thus Tertullian says, "Si me odor alicujus loci offerderit, Arabia aliquid os ando." In much later times it has been proved that these aromatics prevent the development of siphilic bacteria.

Piesse states, in his book on perfumery, that one of the most largely used incenses of his time was mostly gum olibanum pers. He mentioned the maker's name, and a sample from the same house which was lately sent to me for examination bears out that statement.

Yours truly,
J. C. MCWALTER.

Dublin, August 21.
[We have also received replies in support of the shell theory from Mr. George Brown (Sandown), Mr. John F. Cross (Wingate), Mr. J. E. Forret (Edinburgh), "X." (96/25), and others. The preponderance of opinion regarding the substance being the product of a shellfish seems conclusive; but that is exactly what the ecclesiastical authorities whom we had consulted are doubtful about.—*Ed. C. & D.*]

Johore Ipecac.

SIR.—In your issue of June 24 I read with interest an article on ipecacuanha imported from Johore *via* Singapore. During this last week I have had an interesting conversation with the gentleman who grows it on his estate, and who sent the last shipment to Europe. He is a planter—principally coffee—and is one of the authorities on coffee in particular and planting in general in the Straits. He says he planted the ipecacuanha years ago merely as an experiment to see whether it would grow or not. At first all or nearly all his plants died, the ground where they were planted being much too dry. By and by he got to know the conditions under which it would grow, and has made various shipments to England of the root. He was very highly pleased with the comments in the *C. & D.* on the root, and, seeing coffee (Liberian) has fallen to such a low ebb as regards prices (at least in the Straits), thinks of paying more attention to ipecac. in future than he has done in the past. He says he has sent samples of the root to Java, Ceylon, and China, and all agree that the plant will not grow in these climates. So to all appearances the moist and dry alternate climates of the Straits suits it. He used to grow it in Johore, but for a few years back it has grown to much better advantage in the state of Selangor, and it was from there that the last two or three shipments have been made. When once he has sufficient planted he hopes to be in a position to send regular shipments to Europe, but at present he only sends a parcel occasionally, as he collects it.

Yours respectfully,
JAMES MCKENZIE.

Singapore, July 27.

The Company Question.

SIR.—"Auld Reekie" approves of the exclusive principle of the Council's suggestions—that is, that the practice of pharmacy should only be carried on by qualified persons. His arguments are conclusive, and his position may be summed up—this or nothing. We are more concerned at present in seeking to understand the true import of the Lord Chancellor's reference to "vested interests." In your article on "Betterment of Pharmacy" (August 12) you review the various schemes which have been brought forward—the suggestions of the Council and Blackhurn on the one hand, which are intended to rid pharmacy of the "company" incibus, and, on the other hand, the Edinburgh suggestions and Mr. H. R. Parker's scheme, which are to regulate and restrict company-trading. Midway between these two extremes there is an interesting proposal—and you, Sir, deal with it fully in an article in your issue of July 22—to which a number of chemists have pinned their faith. It is a regulation scheme, but it is supposed to be more drastic in its operations than any other of its kind, inasmuch as it provides not only for qualified management, but also for a qualified directorate. All the directors are to be qualified. At first sight this seems a very formidable proposal. But when we know that a limited company may legally carry on business with one director we see how such a scheme would fail to accomplish what the promoters desire. With such a proposal a registered person might be manager and director to a company—in other words, "managing director"—while a committee of management could work along with such a director.

I am, &c.,

W. S. GLASS.

193 Morningside Road, Edinburgh, August 22.

[It is as well to be accurate. At present limited companies keeping open shop for the sale of poisons do not require *any* qualified director, and directorship has nothing to do with the matter, but the poisons, as in all cases, must be sold by a registered chemist and druggist. The House of Lords has already ensured this regulation.—*Ed. C. & D.*]

Companies and Cutting.

SIR.—Amidst all this discussion and agitation aent company-pharmacy there is one thing which sorely exercises my mind, and concerning which I have vainly sought information.

Now I take it that it does not require a very keen understanding to see that this warfare is being waged considerably more in the interests of the pockets of legitimate traders than in the interests of the public. That being so, I should like to know if, when we have wiped out Mr. Jesse Boot and his tribe, we shall still have the cutting chemist to deal with? Or will the lion (the cutter) lie down with the lamb (the P.A.T.A.), and shall a little child (an innocent puhlic) feed them with profits varying from 50 to 200 per cent.? Can you, Mr. Editor, enlighten me on this point?

I am, yours faithfully,
Nottingham, August 21. VERY ANXIOUS. (96/49).

[So far as we are concerned cutting is a mere incident in the company-question. The basis of our objection to company-pharmacy is that it is an intrusion of the impersonal into a calling for which the law requires a personal qualification. That is the first thing to be put right, as we said in 1880, before cutting came into the field.—*Ed. C. & D.*]

The Spectaclemakers' Company.

SIR.—In giving my experiences of the S.M.C. examination in the *C. & D.*, July 1, page 28, I omitted to say that they related only to the examination in visual optics. Owing to my short time in the optical business, it will be necessary for me to take the full examination at a future date.

I should be glad if you will explain the matter, as I have heard that some misunderstanding has been caused.

Yours truly,
THE WRITER OF THE ARTICLE. (98/6.)

Coroners and Inquests.

SIR.—I should really like to know what steps the Pharmaceutical Council have ever taken with regard to the insults chemists have to receive from coroners, with the alternative of being committed for contempt if an explanation is wanted

to be given by the poor chemist. If you read these reports of cases week by week, you will find it intensely exasperating to the every-day chemist. I should like to get one or two of the coroners' answers upon this subject—let them come into print and so enable a man to get at them; instead of, as you may say, stabbing in the dark and hiding behind their own judicial position. Chemists nowadays are in a very queer position. The following is a recipe for keeping out of the clutches of the law:—

1. Never prescribe, as a coroner knows as much about medicine as you do yourself—at least one of them said so last week.

2. If a person comes in with "headache" and asks for a powder of your own, send him to the "doctor," for if he happens to die suddenly a few days afterwards they will blame the "powder," and it might prove awkward, as the medical man might say during the inquest if the person had come to him at once probably something definite might have been done for him.

3. If ever you have the honour of being called before his highness, and he says chloroform or laudanum should have been signed for and witnessed, do not contradict; it will be much better for you if you keep quiet.

I hope all chemists will remember this advice—for the present, at any rate—as I believe a certain coroner in my neighbourhood is preparing a pamphlet on "what chemists should do and what they should not do," based on his knowledge of pharmaceutics and poison laws.

CHEMIST. (98/23)

Legal Queries.

262/37. *Curious.*—A Minor man may not legally call himself a pharmacist even though he be a member of the Pharmaceutical Society. Section 15 of the Pharmacy Act, 1868, reserves that title to pharmaceutical chemists.

95/31. *Saxin.*—Each sheet of an apprentice's indenture must be stamped with a 2s. 6d. stamp. The law states that "every writing relating to the service or tuition of an apprentice is to be deemed an instrument of apprenticeship," and to make it valid it must be stamped accordingly. The stamped indenture-forms supplied by stationers have two 2s. 6d. stamps embossed upon them, one upon the upper half and the other upon the lower.

95/73. *Wholesaler.*—(1) Persons who are engaged in bona-fide wholesale dealing are exempt from the first fifteen sections of the Pharmacy Act, therefore, as the titles are protected by the fifteenth section, it is legal for a firm to address or advertise themselves as "Blank & Co., wholesale chemists." (2) There is no law to prevent a single individual calling himself "Blank & Co."

97/62. *Climax.*—As a person who sells wines is a vintner, if you obtain a wine-licence and sell wine you will technically infringe the condition of your lease which prohibits the business of a vintner being carried on in the premises. There is not in law any such thing as "medicated wines," and wine-licences are not required for the sale of wines sufficiently medicated as to make them unpalatable as beverages. Cannot you come to an arrangement with your landlord in regard to the matter? You should be able to stock and sell all the wines you desire without giving your pharmacy the least appearance of being a vintner's establishment.

97/19. *Worc.*—How can the date on which a contract terminates be anything else than the date on which notice of termination is given and received?

Miscellaneous Inquiries.

89/16. *Orthoform.*—*Preserving Easton's Syrup.*—The development of colour in this syrup is not due entirely to oxidation of the iron, but is due in a measure to the production of caramel by the action of the phosphoric acid on the sugar. The colouration resulting from oxidation is prevented by storing in small, well-filled bottles. The reduction of the amount of acid delays the caramelisation

of the sugar, but no one has been able to suggest a really effectual way of keeping the syrup.

89/70. *Libes—Black currant Cough-mixture:*

Potassium nitrate	...	...	5ij.
Potassium bromide	...	...	5ij.
Ipecacuanha wine	...	...	5iv.
Extract of liquorice	...	...	5iv.
Oxymel of squills	...	...	5xl.
Black-currant juice	...	...	5xx.
Chloroform-water	...	...	5v.

5j. or 5ij. every three hours; children, half that dose.

If the addition of a scheduled poison is not objected to, use chloroform 5ij. in place of a like quantity of chloroform-water.

83/54. *Doubtful.*—*Pulv pro Mist. Cretæ.*—An error has crept into the formula given for this in the *C. & D.*, July 8, page 67. It should read as follows:—

Prepared chalk	...	...	2 oz.
Powdered tragacanth	...	...	120 gr.
Oil of cinnamon	...	...	30 min.
Powdered sugar	...	...	4 oz.

Mix.

43 gr. with 5j. of water equals mist. cretæ B.P.

86/6. *Chick.—Roup powder:*

Chlorate of potassium	...	...	1 oz.
Powdered cubeb	...	...	1 oz.
Powdered anise	...	...	½ oz.
Powdered liquorice	...	...	1½ oz.

Mix.

Directions.—Mix a teaspoonful of the powder with the food for twenty fowls.

89/23. *Extrait*—“Pharmaceutical Formulas” (7s. 6d., Office of the *C. & D.*) contains a large number of perfume-formulas, and deals with artificial perfumes as well.

87/24. *A. S.*—Heating a gold ring to volatilise a mercury stain is apt to discolour the gold, so also is the application of acids. A jeweller would remove the stain in a few minutes by a polishing wheel.

87/31. *J. K.*—*Acetylene installation.*—See an article on acetylene for shop lighting in the *C. & D.*, April 9, 1898, page 585. Generators can be obtained from Read Holliday & Sons, Huddersfield, or Thorn & Hoddle, New Tothill Street, London, S.W.

82/32. *F. H. S.*—*Destroying Wasps.*—The most effectual method of destroying the wasps' nests is to pour from 5 to 8 oz. of solution of cyanide of potassium (1 oz to 1 pint) into the hole. The poison acts very quickly. If you want to catch the wasps which infest a room a weak solution of sugar in beer will attract them, and they generally get drowned in the liquid.

263/36. *Soda.*—Care should be taken to store seltzogen-powders away from damp, or the bicarbonate of soda will become caked. It is always safe to give directions to crush the soda before putting it in the vase, and the user should see that it is dissolved before adding the acid.

78/49. *H. N. P.*—Thanks for the poem. We would not be surprised if the young man succeeded Mr. Alfred Austin, so we refrain from printing his effusion.

75/26. *Canis* writes:—“The instructions for Treatment of Jaundice in Dogs, as given in ‘Veterinary Counter-practice,’ are not adapted for use as a stock-remedy. Can you suggest a good formula for a jaundice-pill, to be given, say, every day, and put up as a stock article along with other dog medicines?” [It has to be borne in mind that what is wanted is one or two bold doses of calomel, and a change to other remedies immediately. A very popular remedy for jaundice, consisting of calomel, &c., sometimes produces salivation when given every day. Could you not make pills of two colours, say, blue and pink, directing the blue (calomel) to be given the first two days, and the pink on succeeding days, until the dog recovers? The pink ones

might consist of pulv. jalape 3 to 5 gr and mag. sulph. exsicc. 20 to 30 gr, *plus* excipient. You know that large pills are more easily administered than small ones to dogs?]

76/8. *Musk*.—We do not understand what you mean by the term "regraining." To Grain Musk (which is more or less a trade secret) carefully open the pod, and lay aside all the larger clots of musk which it may contain, as these are considered more valuable than the smaller ones. Rub up the remainder of the musk in a mortar until the grains are thoroughly separated, taking care to remove small hairs and pieces of skin (although in Mincing Lane it is almost necessary to mix the grains with little bits of skin to show the genuineness of the article). Scrape the pod well with a blunt knife. The grained musk should be kept in a tightly-stoppered glass bottle. Sometimes the natural ammonical flavour of the musk is imitated or increased by squirting diluted ammonia over it.

81/51. *Dorset*.—The *Photographic Dealer* (Marshall & Brook, Harp Alley, Farringdon Street, E.C.) is a monthly journal devoted entirely to photographic and scientific apparatus from a dealer's point of view. Our "Photographic Notes," written by a pharmaceutical camerist, occur at intervals during the year.

82/23. *W. J. B. B.*.—There is no "market-price" for Muspratt's "Chemistry," 1803. The price you will obtain for it depends upon many circumstances. Your best course will be to advertise your copy in our coloured Supplement.

85/23. *H. J. H.*—(1) We make a point of not supplying formulas of proprietary preparations. (2) If you will refer to the index of the last number, you will be able to find some formulas for sulphur hair-restorer. We have given a recipe so recently that we cannot repeat for some time.

92/7. *Birmingham*.—The following is the complete formula for Amethystine Carboy-colour, as given in "Pharmaceutical Formulas," page 417:—

Salicylate of sodium...	...	...	10 gr.
Tincture of perchloride of iron	...	...	½ dr.
Water...	...	...	2 gals.

Dissolve the salicylate in the water, and add the tincture.

90/2. *Medicus*.—Disinfectant for Death-chamber:—

Ac. carbol.	...	...	...	1 oz.
Ol. eucalypti	...	...	...	1 oz.
Ol. pini	...	...	...	1 oz.
Spt. rect.	...	...	...	3 oz.

M.

Use by spraying.

89/73. *A. B.*.—The "Mustard Oil" made by adding 1 dr. of volatile oil of mustard to 8 oz. of olive oil is a risky article to sell for the natural expressed oil, from the point of view of the Sale of Food and Drugs Act.

84/37. *X. Y. Z.*.—Waterproofing Coat.—The following modification of the lead-sulphate method of waterproofing cloth gives fairly good results:—Steep the cloth for twenty-four hours in a bath made by boiling 1 oz resin soap in 2 gals. of water, and then in the clear solution which is poured off after dissolving 1 lb. of aluminium sulphate and ½ lb. of lead acetate in 8 gals. of water. The resin soap can be made by boiling 2 parts of tallow and 1 of yellow resin with soda and adding to the lye $\frac{1}{10}$ part each of glue and linseed oil, continuing to boil for half an hour.

95/30. *Alchemist* is about to put on the market a new preparation for which he has invented a name, and he wishes to know the best course to adopt in order to protect the article. We consider that it would be exceedingly unwise for him to patent the preparation if it is of the nature of a galenic preparation. Should it contain a poison the Pharmaceutical Society will certainly endeavour to have the patent invalidated by the usual legal process. "Alchemist's" best course is to keep his formula as secret as possible, and register the invented name as a trade-mark.

96/44. *Crassus*.—There is no charge for the insertion of deaths and marriages in the *C. & D.* We do not publish notices of births.

94/55. *Myosotis*.—(1) Pil. aloes et ferri, B.P., is a simple and useful female-pill. Pills containing ergotin cannot be sold without registration of the sale in the poisons-book. (2) Strong purgatives are liable to induce abortion. We cannot answer your other questions, which are directed to the encouragement of criminal proceedings. As a beginner in business you should note that. Read "Diseases and Remedies."

Information Wanted.

The Editor will be obliged for replies to the following from any who can furnish the information.

97/22. Makers of "aniline greasy paste" in tins. An American preparation for marking cattle.

Wills of Deceased Chemists.

BOURNE.—The will of Mr. Chas. M. K. Bourne, chemist and druggist, West Bromwich, who died on September 25, 1898, has been proved in London by Mrs. Alice K. Bourne, the widow, and Mr. Edward Amsdon, the executors of the testator, whose estate is sworn at 501*l.* 0*s.* 10*d.*

BRAMWELL.—The will of the late Mr. James Bramwell, chemist and druggist, 26 Nelson Street, Liverpool, has been proved by Mrs. Elizabeth Bramwell, the widow, and Dr. William Bramwell, the executors of the testator, whose estate is sworn at 954*l.* 2*s.* 2*d.*

BRITTON.—The late Mr. William B. Britton, of Bridge House, Barnstaple, chemist and druggist, having died intestate, letters of administration of his estate have been granted in London to Mrs. Jaquette M. J. Britton, widow of the deceased, whose personality was sworn at 58*l.*

CAWDELL.—The will of the late Mr. George Cawdell, chemist and druggist, Luton, has been proved by Mr. Thomas Neville, the acting executor of the testator, whose estate was sworn at 33*l.* 7*s.*

CHURCH.—The will of the late Mr. Joseph Only Curtis Church, chemist and druggist, The Street, Acle, Norfolk, has been proved by Miss Maria G. Church and Mr. George Berk, the executors of the testator, whose estate was sworn at 459*l.* 18*s.* 8*d.*

DAVIES.—The will of the late Mr. P. H. Davies, chemist and druggist, March, Cambridgeshire, has been proved by Mrs. Elizabeth B. Davies, the widow, and Mr. James Green, the executors of the testator, whose estate is sworn at 3,123*l.* 9*s.* 1*d.*

DRACKLEY.—The will of the late Mr. Thomas Drackley, chemist and druggist, Market Bosworth, has been proved by Messrs. Nathaniel and Thomas Drackley, and Mr. Henry W. H. Redman, the executors of the testator, whose estate was sworn at 3,657*l.* 8*s.* 10*d.*

FERN.—The late Mr. Isaac Fern, chemist and druggist, 20 Commercial Road, Macclesfield, having died intestate, letters of administration to his estate have been granted in London to Mr. William Isaac Fern, surgeon, the next-of-kin of the deceased, whose estate was sworn at 584*l.* 9*s.* 4*d.*

HARES.—The will of the late Mr. Samuel Hares, chemist and druggist, Prees, Shropshire, has been proved by Mr. Thomas H. Urry and Mr. Thomas Cartwright, the executors of the testator, whose estate was sworn at 1,125*l.* 7*s.* 3*d.*

IRELAND.—The late Mr. William Ireland, chemist and druggist, Egremont, West Cumberland, having died intestate, letters of administration to his estate have been granted to Mr. E. J. Ireland, pharmaceutical chemist, as next-of-kin of the deceased, whose estate is sworn at 2,038*l.* 15*s.* 7*d.*

SOWRAY.—The will of Mr. R. D. Sowray, chemist and druggist, Skelmersdale, Lancashire, who died on July 10, 1898, has been proved by Mr. John Thompson, wholesale druggist, the sole executor of the testator, whose estate is sworn at 24*l.* 18*s.*

WOOD.—The late Mr. J. A. Wood, chemist and druggist, Leicester, having died intestate, letters of administration to his estate have been granted to Mrs. Eileen Wood, widow of the deceased, whose personality was sworn at 13*l.*

Personalities.

MRS. FRED REYNOLDS has a new novel in the press, which will be published by Messrs. Hutchinson & Co. The last success was "A Tangled Garden." The next is to be "In the Years that Come After."

MR. GEO. MEE, the Wellington member of the N.Z. Pharmacy Board, is, with Mrs. Mee, taking a six months' trip to England. Mr. Mee has been in indifferent health for some time, and it is hoped that the voyage will restore him.

MR. JOHN ELLIOTT, chemist and druggist, of Berwick, has just celebrated his golden wedding. Mr. Elliott is eighty-three and his worthy partner is ninety years of age. For nearly sixty years Mr. Elliott has been in business, and he still gives daily attention to it.

MR. A. B. CHATER, of Thomason, Chater & Co., Brisbane, who is now on a visit to England, was before leaving presented with a travelling-bag by the employés of the firm. Mr. Chater acknowledged the words and gift of the employés, and said he valued their expressions of good will very highly.

Freedom, "the giant of the Orient," comes to us from Manila apparently to announce that Mr. Robert R. Martin, representing Stearns, of Detroit, and Mr. Eugene Ross, representing Johnson & Johnson, the plaster manufacturers, had left Manila, Mr. Ross going on to Japan, then home, and Mr. Martin to Singapore and Java, *en route* for South Africa.

THE following pharmaceutical chemists have passed the Intermediate examination in science for the B.Sc. degree of the London University:—Messrs. George Senter (Edinburgh), with honours; W. A. Knight (London), P. E. F. Perredes (Dartford), E. C. Spurge (South Hackney), T. E. Wallis (London), Harold Wilson (London), and E. W. Pollard (Ryde).

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section free of charge, if properly authenticated.

DAY'S SOUTHERN DRUG COMPANY have opened another branch at High Street, Chatham, Kent.

MR. A. SIMPSON, chemist and druggist, has opened a chemist's business at 114 High Street, Merton.

MR. H. LITTLE, chemist and druggist, has opened a pharmacy at 81 Tudor Road, Riverside, Cardiff.

PARKE'S DRUG-STORES (LIMITED) have opened another branch at Wimhledon, nearly opposite the L. & S. W. Railway Station.

MESSRS. McDougall BROTHERS, agricultural chemists, 10 Mark Lane, have admitted Mr. James Stevenson Binning as a partner.

MR. C. J. TAYLOR, pharmaceutical chemist, 101 Dover Road, Folkestone, has opened a branch at 36 Black Bull Road, Folkestone.

MR. C. J. PALMER, chemist and druggist, has purchased the chemist's business of the late Mr. H. Shelley at 20 King Street, Twickenham.

TIMOTHY WHITE (LIMITED), Portsmouth, have purchased the chemist's business opened a few months ago by Walker & Harris at Queen Street, Ramsgate.

MR. HARRY COOK, chemist and druggist (formerly Goldthorpe & Cook), High Street, Chatham, Kent, has opened a branch at 11 King Street, Gravesend.

MR. A. H. BAKER, chemist and druggist, of High Street and Halfmoon Lane, Gateshead, has disposed of the retail sale of his business to Mr. A. B. Beatton and the wholesale to Mr. J. Cawthorn.

MESSRS. HOLIDAY & Co., wholesale druggists, Gilesgate, Durham, announce that they have added to their premises the City Mills, together with the greater portion of the plant, in order to satisfactorily meet the increase in their business.

Japanese Camphor-monopoly.

(Communicated by our Yokohama Correspondent.)

THE Formosan Governor-General has promulgated the regulations relating to Government camphor-monopoly, which are as follows:—

Art. I.—The word "camphor" in these regulations refers to the crude article, and "camphor oil" is understood to be a by-product made from crude camphor.

Art. II.—Camphor and camphor oil are to be bought up by the Government from manufacturers, and nobody will be allowed to store, sell, consume, or export the same unless they have been purchased from the Government.

Art. III.—The buying-price will be fixed by the Governor-General.

Art. IV.—No camphor or camphor oil will be permitted to be exported from any place in the island except from the ports of Kelung and Tamsui, admitted by the Governor-General.

Art. V.—The manufacturer should send application to the Government for the disposal of his products, showing the estimated amount of his production annually.

Art. VI.—Camphor and camphor oil will be sold at fixed prices, and, if necessary, will be put up to public auction.

Art. VII.—Government officials may examine any place where camphor and camphor oil are manufactured or deposited and at any time. They are also empowered to take the necessary steps for controlling these.

Art. VIII.—The penalty for violation of Arts. II. and IV. is a fine of from 50 yen to 500 yen, and cargoes, irrespective to whom they belong, will be confiscated in the event of conviction of the exporter.

Art. IX.—Those who obstruct officials in the performance of their duty in accordance with Art. VII. will be fined not less than 20 yen and not exceeding 200 yen.

Art. X.—Those who make false assertions in regard to officials' inquiry will be punished by a fine from 10 yen to 100 yen.

Art. XI.—Those manufacturers or dealers who adulterate camphor and camphor oil will be fined from 10 yen to 100 yen, and the goods will be confiscated.

Art. XII.—Those who violate these regulations will not be punished in accordance with criminal code.

Art. XIII.—Manufacturers are to be held responsible in the event of their representatives or employés violating any regulations.

Art. XIV.—Necessary regulations besides those fixed, and date of enforcement of the regulations, will be made public by the Governor-General.

Art. XV.—All foregoing rules regarding this industry will come to an end as soon as these regulations come into force.

Art. XVI.—These regulations will not apply to camphor and camphor oil that was manufactured before the regulations came into force.

Art. XVII.—These regulations will not be applicable to camphor manufactured from camphor oil until further notice.

Camphor and Camphor-oil Manufacturing Regulations.

Art. I.—Those who wish to manufacture camphor and camphor oil must procure Government licences.

Art. II.—Government will cancel the licences thus given if the manufacturer does not carry on the manufacture with the necessary plant during the stipulated period.

Art. III.—If the Governor-General recognises that this industry is injurious to the public welfare, he is authorised to stop manufacture and at the same time cancel licences.

Art. IV.—When a manufacturer's licence has been cancelled or abandoned, the camphor-trees will be bought up by the Government.

Art. V.—Those who manufacture without Government licences will be fined at 50 yen to 500 yen, and camphor and camphor oil will be confiscated.

Art. VI.—Those who use the camphor-trees sold by the Government for manufacturing-purposes or any other object will be punished with a fine of from 10 yen to 100 yen, and the existing trees will be seized, while for those already used such people must pay indemnity.

Art. VII.—Regarding this industry, besides this regulation, Arts. VII., X., XII., and XIII., of monopoly regulations will apply.

Art. VIII.—Besides the foregoing regulations, the Governor-General may fix further regulations if necessary.

Art. IX.—When these regulations come into force all other regulations relating to this industry will be acknowledged as unlawful.

Art. X.—Those who have licences under existing regulations will be recognised as having lawful rights until the expiry of the stipulated time.

Trade Report.

The prices quoted below are the bottom prices obtained for bulk quantities by importers and manufacturers, who do not supply retailers. They are in many cases exclusive of various charges.

42 Cannon Street, London, E.C.: August 24.

QUIET conditions have prevailed in all departments of trade this week, and, with one or two exceptions, the few changes in price have been unimportant. The two leaders, opium and quinine, remain very quiet. The former continues fairly firm, but buyers' ideas at present are much below those of holders. A reduction in quinine is anticipated by makers should the unit decline at the Amsterdam bark-sale to-day, as is probable. A further advance has been made in ergot, and conditions abroad warrant the advance. The following are the principal movements of the week:—

Higher	Firmer	Easier	Lower
Cantharides	Canary-seed	Acid, citric	Chamomiles
Condurango	Menthол	Ammonia	Copper sulph.
Ergot	Senega	sulphate	Oil, pepper-
Lycopodium		Camphor	mint
Oil, palm		(crude)	(HGH)
Pepper		Oil, turpentine	Quinine
Wormseed			

The following drugs have arrived at this and other ports from August 17 to 23, both inclusive:—Aniseed oil (Chinese), 20; areca-nuts, 20; benzoin, 45; calumba, 103; cardamoms, 248; cassia oil, 40; castor oil (E.I.), 125; (Ital.) 10, (Belg.) 49; chamomiles, 7; cinchona, 60; cod-liver oil, 132; coriander-seed, 166; croton-seed, 6; dragon's-blood, 4; fenugreek, 275; galla (Chinese), 151; gum arabic, 37; (Morocco) 52; gum damar, 100; gum olibanum, 59; gum gamboge, 6; gum (unenumerated), 108; insect-powder, 20; iodine, 56; ipecacuanha (from Bremen) 4, (Cart.) 4; kola, 11; peppermint oil, 30; rhatany, 3; saffron, 1; sarsaparilla, 23, (via Hamburg) 27; senna (Tinny.), 50; soy, 208; squills, 10; vanilla, 21; wax (bees'), 120.

Otto of Roses.

Mr. H. A. Holstein, of Kezanlik and Constantinople (for whom Messrs. David Thom, Domeier & Co., Limited, are agents), estimates this year's crop of otto of roses at 460,000 meticals, equal to about 69,000 oz. Turk., against—

320,000	meticals, equal to about	48,000	oz. Turk. in 1898
470,000	"	70,000	" 1897
740,000	"	110,000	" 1896
480,000	"	72,000	" 1895
385,000	"	57,750	" 1894
380,000	"	57,000	" 1893
280,000	"	42,000	" 1892
460,000	"	69,000	" 1891
500,000	"	75,000	" 1890
550,000	"	82,500	" 1889
500,000	"	75,000	" 1888

Adulteration of Sicilian Oils.

The U.S. Consul at Messina (Mr. C. M. Caughey) has sent a letter to the State Department at Washington, suggesting that all dealers in essential oils who purchase under chemists' certificate should take a sample in the presence of witnesses immediately upon arrival of the goods, and send it for analysis to a firm of analytical chemists in Messina, whom he mentions. The Consul thinks he has made a great discovery—viz., that even after a copper of essential oil has been sealed it can be most successfully tampered with, as, by a minute's contact with a hot iron or the line of solder which encircles the copper, sufficient can be removed to allow two little holes to be made. The copper is then placed on its side, and some of the contents run off, after which the adulterant (turpentine) is readily injected with a syringe, and a few passes of the soldering-

iron destroy all traces of the work. The Consul wishes it to be understood that he has not heard of any exporter adopting this method, but merely how it can be done.

Carriage of Liquid Ammonia on Board Ship.

The Board of Trade has issued the following instructions to surveyors regarding the precautions to be adopted when this liquid is carried as cargo on board ship:—It should only be packed in iron vessels which have been carefully tested up to a pressure of 675 lbs. per square inch, and should be stored in a part of the ship beyond the influence of any heat from boilers or furnaces, and remote from the living quarters. The aqueous solution of ammonia of a sp. gr. of 0.880 at 60° F. should be conveyed in drums of about 12 gals. capacity, with an empty space equal to 5.33 per cent. left in each drum. If for carriage on board ship the drums should be capable of withstanding a pressure of 66 lbs. per square inch, and should be packed in cases with not more than four drums in a case, the interstices being filled with sawdust. But for short voyages, such as to Ireland or the Continent, the drums need not be packed in cases. At a temperature above 130° F. the expansion of liquid ammonia is rapid, and a risk of explosion much increased. Care should therefore be taken not to expose drums containing this liquid to the rays of the sun or to the influence of heat from boilers. It should be carried well away from the living-quarters as deck-cargo only, and should not be covered with black tarpaulin. Ammonia solution of a sp. gr. of 0.959 and upwards is exempted from the operation of the above instructions.

Heavy Chemicals.

[These prices are for other market-centres than London.]

There is little new of special importance regarding the general condition of the heavy-chemical market to report this week. A steady demand for the main products at fully-maintained prices still exists, both for home and export. Bleaching-powder and caustic soda continue firm and are in good request. Saltcake is somewhat irregular, but value stands about as last quoted. Yellow prussiate dull.

SOUTH DURHAM SALT is very firm and moving steadily, at 9s. 6d. per ton, f.o.b. Tees.

SULPHATE OF AMMONIA is quiet, at following figures:—Beckton, September, 12l. 10s.; October and forward delivery, 12l.; Beckton terms, 12l. 5s.; Leith and London, 12l. 7s. 6d. to 12l. 10s.; and Hull, 12l. 5s. per ton.

NITRATE OF SODA.—Ordinary, 7s. 9d.; refined, 8s. per cwt.

SAL AMMONIAC.—35l. and 33l. per ton respectively for firsts and seconds.

COAL-TAR PRODUCTS are for the most part a dull market. Benzols, 90 per cent, 8d., and 50 per cent, 10d. to 10d. Pitch is firm, at about 33s., f.o.b. Aniline salts, 4½d. Aniline oil, 4½d. to 4½d. Toluol, 1s. 2d. to 1s. 3d.; and pure, 2s. 2d. Anthracene, A grade, 3½d. to 4d.; and B grade, 2½d. to 3d. Naphthas: Solvent, 90 per cent, 1s. 2d. to 1s. 2d.; 95 per cent, 1s. 3½d.; crude naphtha, 30 per cent, 3½d. to 4d.; solvent wood colourless, 2s. 9d. to 3s.; and miscible, 3s. 10d. to 4s. 1d. Carbolic acids firm: crude 60 per cent, 2s. to 2s. 1d., and 75 per cent, 2s. 8d. to 2s. 8½d.; crystals, 34-35° C., 6½d. to 7d., 39-40° C., 7d. to 7½d. Creosote, 3½d. to 3½d.

RECOVERED SULPHUR.—Firm, and in good inquiry, at 4l. 12s. 6d. to 5l. per ton, free on rails, in bags.

PHOSPHORUS.—Steady. Wedges, 2s.; and sticks, 2s. 1d. per lb. Amorphous, 2s. 6d.

BROWN ACETATE OF LIME.—Steady, at 4l. 15s. to 5l., c.i.f.

Liverpool Market.

Liverpool, August 23.

CASTOR OIL.—The position of Calcutta good seconds during the week has improved, and holders are now asking 2½d. to 2½d., and speak of 3d. as the price in the near future. First-pressure French is firmer, and 2½d. is now quoted for store lots, and higher prices are reported as having been paid for parcels to arrive. Second-pressure is obtainable at 2½d. Small sales of Madras good seconds in barrels are reported at 2½d. per lb.

CANARY-SEED.—The strong reports from Turkey are again confirmed, and small parcels of bright Turkish said to have changed hands on the spot at 39s., which is an advance of 1s. per quarter for the week.

WAX, CARNAUBA, continues to meet with a ready sale, and, although prices are not quotedably changed, holders are very firm in their views.

GUM ACACIA.—Some holders are showing a little more disposition to meet the views of buyers. Soudan sorts range in value to-day from 62s. 6d. to 75s. per cwt., though a shade less might be taken.

BEESWAX continues to be firmly held, notwithstanding the recent heavy arrivals of Chilian. A parcel of grey to fair yellow has been sold at 6*l.* 15*s.* Chilian ranges in value to-day from 6*l.* 15*s.* to 7*l.* 10*s.* per cwt.

IRISH MOSS.—Arrivals of new crop are falling off, and importers talk of 6*l.* 10*s.* per cwt.

SULPHATE OF COPPER.—Easier at 23*l.* 10*s.* per ton.

QUILLAIA-BARK.—Steady sales have been made at 13*l.* 5*s.* in quantity, and owners talk of 13*l.* 10*s.* for more.

HONEY.—Chilian is in fair demand, at prices ranging from 19*s.* 6*d.* to 30*s.*, the latter being paid for Pile X. Californian is unchanged in value, but the stocks available are practically *nil*. For the small quantity offering values range from 35*s.* to 50*s.*

FENUGREEK-SEED.—Firmer, at 7*l.* 2*s.* 6*d.* to 7*l.* 10*s.* per ton.

German Market.

Hamburg, August 22.

Business in general is quiet here just now, and the drug market presents a tame appearance.

CAMPHOR, REFINED, is without animation, there being second-hand sellers at 325*m.* per 100 kilos.

CASSIA LIGNEA is firm, at 84*m.* to 86*m.* per 100 kilos.

CASCARA SAGRADA is also firm, at 60*m.* to 62*m.* per 100 kilos.

CONDURANGO-BARK has advanced considerably; the arrivals of new crop have been very small so far, and stocks here are limited. 100*m.* has been paid, and 120*m.* per 100 kilos. is asked to-day.

CUMIN-SEED, new Maltese, is firmer, with only small arrivals, for which 56*m.* is asked.

CARAWAY-SEED is tending firmer, 45*m.* to 46*m.* per 100 kilos. being asked for 1898 as well as for 1899 crop.

COCAINE is unchanged but firm, at 495*m.* per kilo.

MENTHOL is firmer, at 16*m.* per kilo.

LYCOPODIUM has advanced; to-day's quotation is 275*m.* per 100 kilos.

QUININE remains dull and neglected, with second-hand sellers at 40*m.* per kilo.

WORMSEED is very scarce and dearer; good quality has been in fair demand, and prices vary from 48*m.* to 55*m.* per 100 kilos, according to quality.

SPRIT OF TURPENTINE is quieter. Holders wish to realise their profits, and there were sellers to-day at 76*m.* per 100 kilos. for spot and September-December delivery.

WAX (JAPANESE) steady at 55*m.* per 100 kilos.

COD-LIVER OIL is unchanged and quiet at 58*m.* per barrel. Castor oil firm, but slow of sale; first-pressing in barrels at 51*m.* per 100 kilos.

ESSENTIAL OILS are almost unchanged since last week.

ERGOT or RYE is very firm and tending higher. The stocks in Hamburg are very small, and are estimated at only a few hundred kilos. Reports from Russia say that the crop will be very meagre this season, and that we shall soon see higher prices; 330*m.* per 100 kilos. has been paid here already, and holders ask to-day 350*m.* for good quality. There are no offers from Russian dealers at the moment. Last week large shipments were made to the United States from Hamburg.

[For Cablegrams see page 382.]

London Markets.

ACID, CITRIC.—Easier in second-hands, sales of 5*lb.* 3*wt.* quantities "guaranteed English crystals" having been made at 1*s.* 5*1/2d.* per lb., although it is asserted in one quarter that this figure is for foreign acid sold as English. Makers' price is unaltered, at 1*s.* 7*d.* per lb.

ACID, TARTARIC.—In good inquiry, and a strong market, at 1*s.* 0*1/2d.* per lb. for foreign, and 1*s.* 1*d.* for English crystals.

ALKANET-ROOT.—A small quantity of last year's crop is available at 20*s.* to 20*s.* 6*d.* per cwt., c. and f. New is not expected until November or December.

ARROWROOT.—Quiet. Fine St. Vincent's was bought in at 5*1/2d.* per lb.

BELLADONNA.—Good root is very scarce in Trieste, and only small quantities can be had for forward shipment. In London only medium quality is offered, for which 38*s.* per cwt. is wanted.

BENZOIN.—Medium qualities are selling at about the auction prices, with a fair inquiry for fine for the Russian market; moderate sales of fair glassy Penang have been made at 75*s.* per cwt.

BUCHU.—There are buyers at 8*d.* per lb., but none to be

had. A few bales have arrived, and will probably be offered at auction next week.

CALCIUM CARBIDE.—Little or nothing is to be had for immediate delivery, as most makers are unable to undertake new contracts until March 1900. The last business done by one maker was at 40*s.* per 100 kilos, f.o.b. Hamburg.

CAMPHOR.—The crude market continues very quiet, and up to Wednesday no business had been reported. There are lower offers of Japanese in the markets—viz., 127*s.* 6*d.* per cwt., c.i.f., for near shipment. The opinion in our last report that the stock of refined in Hamburg was sufficient for one to two years' actual consumption has been questioned in one quarter, and is looked upon as a "bear" statement.

CANNABIS INDICA.—For good green tops 4*d.* per lb. is wanted, but we have not heard that this figure has been paid.

CANTHARIDES.—In good inquiry, and prices are firmer. New Russian flies have been sold this week on the basis of 1*s.* 10*d.* per lb. net, spot. Another holder on Wednesday was willing to sell at 1*s.* 9*d.*, and there is nothing obtainable under this figure. Private advices from Russia intimate that prices of late years at the primary markets have been so low that few people now collect the flies. For new the farmers have refused cable bids of 1*s.* 6*d.* per lb.

CASCARA SAGRADA.—Quiet on the spot at 27*s.* 6*d.* to 30*s.* per cwt. for old bark. Reports from New York, dated August 15, state that advices from the Pacific Coast have improved materially, but in New York there were holders willing to sell at 5*c.* to 6*c.* per lb., according to age and quantity.

CHAMOMILES.—A fair amount of business is being done in new Belgia flowers, for which 54*s.* per cwt. is asked.

CINCHONA.—The shipments from Ceylon for the week ending August 1 were 7,492 lbs., and from January 1 to July 25 they were:—

	1899	1898	1897	1896
Lbs.	...	30,945	28,746	23,550

The Vriesseveem cinchona-bark department at Amsterdam report that the shipments from Java from July 11 to August 21 amounted to 1,164,000 Amst. lbs., and from January 1 to August 21 to 6,142,403 Amst. lbs.

CINCHONIDINE.—From New York a good export inquiry is reported, which may lead to important business, and it is considered probable that the bulk of the stock will be shipped to London.

COCAINE remains firm at the advance. In second-hand there has been a good inquiry, and 13*s.* 9*d.* per oz. is quoted by one holder.

COCOA-BUTTER.—The auctions to be held at Amsterdam on September 5 will consist of 80 tons Van Houten's, 1 ton Helm, and 3 tons Hamer, while on the same date here 70 tons Cadbury will be offered.

COPPEE SULPHATE.—At the close of last week there was a further drop of 2*s.* 6*d.* per ton owing to absence of demand. Ordinary brands are now quoted on the spot at 23*l.* 17*s.* 6*d.*; Anchor, 25*l.* 5*s.*; and Liverpool, 24*l.* per ton.

DRAGON'S-BLOOD.—A few cases of Zanzibar drop offered in auction last week have since been sold at about 70*s.* per cwt.

ERGOT.—Still higher prices are asked this week, the business done including Spanish at 2*s.* per lb. and wormy Russian at 1*s.* 6*d.* On Wednesday 2*s.* was reported to have been paid for Russian.

GLYCERIN maintains its recent firmness, and in second-hands some holders are now asking 49*s.* for double distilled, s.g. 1.260. It is maintained that the position of refined is somewhat anomalous, as crude has advanced about 10 per cent, while chemically pure has not participated to the same extent.

The German market has of late been in a somewhat feeble condition, the refiners finding competition very keen both from abroad and "outside" manufacturers. The syndicate is expected to come to an end shortly, so that a keener competition is looked for. A good inquiry still continues to come from the United States for s.g. 1.260. Crude remains very firm.

GOLDEN SEAL is coming forward more freely in New York, although dealers here quote 2s 4½d per lb., c.i.f., and a small business has been done this week on a slightly lower basis than the above quotation.

GUM ACCROIDES.—Fifty-two bags of fair blocky sold in auction at 9s. 3d. per cwt.

GUM GUAIACUM.—Nothing is now to be had in first-hand, and the London stock is exceptionally low.

GUMS, VARNISH.—The sales of varnish-gum were held today, when the huge supply of 5,597 packages were offered, the most noticeable feature being the offerings of Kauri and copal. The demand altogether was poor, with an absence of good competition.

The following values were some of the prices paid:—Kauri, fine bright hard pale chopped, 7s. to 7s. 17s. 6d.; good three-quarter-scraped, 5s. 2s. 6d. to 5s. 5s.; fine brown ditto, 9s. to 9s. 6d.; good brown half-scraped, 7s. to 7s.; pale chips, 6s. to 8s.; bush chips, 6s.; pickings, 4s. 6d. There was little demand for dust: good pale realised 3s., chippy dust 2s. Animi.—Zanzibar, pale nubbles, 2s.; bold chips, 1s. 6d. Demerara (4 casks), fine bold, 7s. 5s.; ditto medium, 6s. to 6s. 10s. to 8s. per cwt. Copal was mostly bought in at nominal rates.

INSECT-FLOWERS.—Trieste advices, dated August 15, report that there has been a good demand for both European and American kinds, and the market is firm. The quality of open flowers has somewhat suffered this year, as continual rains were falling at the time of harvest. The sales for the first fortnight of this month amount to about 700 cwt.

IPECACUANHA.—Since the auctions there has been a fair inquiry for both Cartagena and Rio, resulting in sales at 10s. to 11s. per lb., according to quality, for the former, and 14s. 9d. for scurd of the latter description. A few bales of Cartagena have arrived this week, but no Rio.

LIME, ACETATE, is quoted 7s. 10s. per ton, c.i.f., Glasgow, Hull, &c., and a fair inquiry is reported.

MENTHOL.—Firmer, with sales at 7s. 4½d. per lb. spot for Kobayashi crys'als, and some holders now ask 7s. 6d.

A City firm supply us with the following report from their Japanese friends, and we give it without comment:—Prices are rising. The first cutting has now been gathered, and is said to turn out very small. The second cutting, which is expected in about a fortnight, is reported to have suffered much owing to floods. Under the circumstances we must, of course, expect a further and considerable rise in prices. The third cutting is expected in October, but of course nothing can be said as yet as to how it will turn out.

NAPHTHA.—Miscible wood (60 to 62 o.p.) is in fair inquiry at 3s. 5d. per gallon, c.i.f.

OIL, COD-LIVER.—Buyers' idea of price is about 54s., and orders could be placed at this figure; but exporters hold out for 58s. per barrel, c.i.f.

BERGEN, August 19.—The feeling in our market has been slightly slower this week, and sales have been made at 54s. per barrel, f.o.b. terms, for best non-congealing Lofoten oil. The export business, however, is still brisk, and shows a total of 8,101 barrels, against 4,946 at the same time last year.

OIL, LAVENDER.—Prices for the new English oil have not yet been fixed, but it is anticipated that they will be slightly lower in consequence of the good crop. In one quarter about 40s. per lb. is named as a likely figure.

OIL, LIME.—Is in good inquiry, but holders require 4s. per lb. for West Indian distilled.

OIL, PALM, has advanced about 1s. 3d. per cwt., finest Lagos being now quoted 25s. 9d. per cwt., with the likelihood of a further advance.

OIL, PEPPERMINT.—There is likely to be little, if any, change in the prices of new English peppermint oil this season. Distillation of the mint is now proceeding at Mitcham. American H.G.H. is lower, sales of 10 case lots having been made at 4s. 9d. per lb., c.i.f. On the spot little attention is paid to the article, and 5s. 1½d. is quoted for 10-case lots.

OIL, TURPENTINE.—Values have slightly receded this week owing to a slow demand, and to-day's quotation is 34s. 3d. per cwt., spot, for American.

OPIUM.—Quiet and neglected. For fine Persian, 12s. per lb., spot, is wanted, down to 10s. to 11s. 3d. for inferior grades. Druggists' grades are quoted 9s. 2d. to 9s. 6d. per

lb. for finest. Holders of Salonica ask 10s. for fine and 10s. 6d. for finest; good orders are in hand for this grade, but are unable to be executed at current prices. The new opium is reported poor in morphine-content, Salonica not averaging 10 per cent.

SMYRNA, August 11.—Thanks to the new concessions accorded by holders, the orders which have appeared upon the market this week have been executed. On this occasion the speculators have not hindered business, as they have purchased a few cases current and Karahissar talequale at 1 piastre over what others have paid, so as to sustain the market. It must be borne in mind that sellers of new opium are losing money at present prices, as they have bought at higher rates. The sales of this week are 86 cases, as follows:—Ten cases old Yerli talequale at the equivalent of 8s. 8d. to 8s. 11d., 34 cases old Karahissar at 8s. 6d., 39 new current at 7s. 10d. to 7s. 11d., and 3 cases new Karahissar at 8s. 2d. per lb., c.i.f. European ports. The arrivals are 1,297 cases, against 559 cases last year.

PILOCARPINE is firm at the advance of last week. There are a few second-hand lots about, which offer at 26s. per oz. for quantity.

QUICKSILVER.—Very firm, the quotation in first hands being still quite nominal at 8s. 7s. 6d. per bottle; but in second hands there has been a fair business at 8s. 9s. to 8s. 10s.

QUININE.—Few transactions have been concluded this week, and the continued drooping tendency is still apparent, due for the most part to the heavy bark-sales at Amsterdam to-day, and the prospect of a possible reduction in the official quotation towards the close of the week or on Monday. On the spot the secondhand quotation on Wednesday was 1s. 1½d. per oz., with buyers at 1s. 1½d.

The shipments from Java during June were 105 cases, which came direct to London. From July 1, 1898, to June 30, 1899, the shipments were 1,619 cases, against 458 cases for the same periods of 1897-98.

ROSEMARY-LEAVES.—New crop is now about due on the Continent, and fair green is offered at 9s. 6d. to 10s. per cwt., c. and f.

SAFFRON is, if anything, firmer, with offers of good merchantable quality at 42s. 6d. per lb., though for finest Valencia 44s. is wanted. Their is a fair inquiry.

SARSAPARILLA.—Quiet, with small sales of Lima-Jamaica, at 10d. per lb. for first pile. For fine white mealy Honduras 1s. 6d. is wanted, down to 1s. 3d. per lb. Buyers are getting shy of Lima-Jamaica root, and it is not such a favourite as it was, owing to the occasional habit of shippers stuffing the inside of the bales with loose chumps, and even stones and earth: no fewer than eight or nine good-sized stones were taken out of a bale in the warehouse recently. The bulk of the New York stock of Mexican in first hands, amounting to nearly 700 bales, has been sold for export on private terms; 7c. to 7½c. is quoted there, but it is understood that these figures were materially shaded on the large export purchases.

SCAMMONIUM.—Sales of fine firsts are reported at 30s. per lb. The nominal quotation for Root is 20s. per cwt., although a recent purchase of a moderate quantity has been made at 18s.

SEEDS.—*Canary* is meeting with more attention, the crops being reported very short. Turkish has been sold at 36s. 6d. per qr, but there are now no sellers at the price. Morocco *Coriander* firm; a parcel at auction was bought in at 9s. 6d. per cwt. Common Mogador *Cumin* has been sold at 25s. per cwt., and *Fenugreek* at 6s. per cwt.

SENEGA.—The quotation has been advanced to 1s. 5d. per lb., c.i.f., without engagement. On August 12 there were sellers in New York at 28c. for September delivery, but few, if any, orders had then been received.

SHELIA remains very quiet, with small spot sales at 64s. per cwt. for second orange.

SODA BENZOATE (ex toluol) is offered by one holder at 1s. 10d. per lb.

SPICES.—The demand for *Pepper* has continued and prices are dearer, but other articles have been quiet and dull. The auctions on Wednesday were light and unimportant: *Cochin Ginger* sold at 70s. to 71s. per cwt. for bold cut, at 28s. for small cut, at 19s. 6d. for small rough, and at

16s. for cuttings. Jamaica partly sold at 57s. to 61s. for middling quality. Zanzibar *Cloves* quiet; good bought in at 3½d. per lb. the quotation for fair being 3½d. to 3½d. for delivery. East India *Capsicum* sold at 29s. 6d. per cwt. for cherries, and at 27s. 6d. for long bright pods on stalk; fine Natal were bought in. *Pimento* steady, a few lots selling at 3½d. to 3½d. per lb. for good clean. *Cinnamon* sold at 9d. per lb. for pieces, and at 6d. for cuttings and featherings, chips being bought in at 3½d. per lb. Saigon *Cassia* was withdrawn at 35s. per cwt. *Mace* sold at 1s. 7d. per lb. for middling palish Penang. *Pepper* is rather dearer, with a good business passing. Singapore black is worth 5½d. per lb. on the spot, and 5½d. has been paid for October-December steamer. Tellicherry was bought in at 5½d., and Penang at 5½d. Singapore white was withdrawn at 8½d., but 8½d. has been paid for distant shipment. Penang sells at 8½d. on the spot, and at 8½d. to arrive.

WAX, JAPANESE.—Quiet, with sellers of good pale squares at 30s. per cwt., spot.

Cablegrams.

SMYRNA, August 24, 140 P.M.:—The opium-market has remained during the week in an unchanged condition, with sales of opium to the Dutch Government of 30 cases of old current and 60 cases of new.

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HAMBURG, August 24, 128 P.M.:—Senega-root and ergot of rye are both advancing. Refined camphor is firm, at 325m. per 100 kilos, while condurango-bark has advanced to 125m. per 100 kilos. Oil of turpentine is dull of sale and easier.

* * * *

NEW YORK, August 24, 36 P.M.:—Business in this market is recovering, and this week the volume done has been above the average. Ergot is a strong market and is advancing, the closing quotation for German being 45c. per lb. Senega is very firm at 36c., and golden seal at 50c. Business in opium is quiet, and the price is \$3.10 per lb. Quinine is steady at 25c. to 32c. per oz., according to make. Mexican sarsaparilla is now 7c. per lb., but the condition of supplies favours an early advance. Coca-leaves are also advancing, to-day's price being 22c. per lb. Rio ipecacuanha is much easier, and is selling at \$3.65.

* * * *

AMSTERDAM, August 24, 530 P.M.:—At the auctions held here to-day 7,564 bales and 276 cases were offered (6,811 in July), of which 7,062 were sold at an average unit of 6.25c. per ½-kilo, as compared with 7.60c. in July. The total weight of the bark was 688,464 kilos., containing the equivalent of 36,397 kilos. (1,173,895 czt.) quinine sulphate. The manufacturing bark contained an average yield of 5.60 per cent. quinine sulphate. The following were the approximate quantities purchased by the principal buyers:—American and English factories, who purchased the equivalent of 10,819 kilos.; Brunswick, 7,685 kilos.; the Mannheim and Amsterdam factories, 7,330 kilos.; the Frankfort-on-Maine and Stuttgart factories, 3,914 kilos.; and various buyers, 3,623 kilos. The prices paid for the manufacturing bark ranged from 10c. to 66½c. per ½-kilo, and for druggists' from 12½c. to 52c. per ½ kilo. The tone of the market was fairly steady at the decline.

WHEN POISONS ARE WITHIN REACH.—Death by misadventure was the verdict of a Hackney jury on August 24, in the case of Edith Maud Robins, aged 2½ years, daughter of a carman, who took a bottle of atropine from the table in her mother's absence and drank some.

A VERY HANDY yet comprehensive "Tourist Guide to the Continent" is published by The Great Eastern Railway Company, neatly illustrated, with a series of useful maps added. Among its features are particulars of the new express service to Norway, Denmark, and Sweden, of new tours in the Luther Country, Thuringia, and the Hartz Mountains. Some of the less frequented but perhaps more attractive districts off the beaten track of the tourist come within the scope of the Guide, which is neatly bound, not too large to fit the pocket, and is published at 6d.

An Indian Engagement.

"SO you think you would like to go to India," said the London agent of an Eastern business-house to me, when I called on him in answer to an advertisement in the *C. & D.* I said I thought I would, but there were a few preliminary questions I would like answered. First, I wanted to know who the firm were with whom I was to serve, and where their business was situated. Satisfied on these points, I asked, "How about passage?" "P. and O. second class out and home." "Holidays?" "A fortnight yearly, and a day off at any time when you can arrange with a fellow-assistant to do your duty." "What will my duties be?" was the next question. A copy of the agreement to be signed was handed to me to peruse. I found exception to a clause, "That the said A. B. shall devote his whole time to the duties of general assistant to C. D. & Co., in any one or more branches . . . in which they may think fit to employ him." "But," said I, "I am a chemist, and do not fancy having to cut up bacon, for instance." My interviewer laughed. "Oh, no!" he said; "you will have practically no manual work to do; the natives do all that. In fact, we do not even require you to dispense prescriptions. The native compounders prepare all the prescriptions, unless, of course, anything particular comes in which you prefer to do yourself." "In case of sickness, what will happen to me?" "Read clause 4 in the agreement." I found that medical attendance and medicines would be provided in all cases of sickness not occasioned by the immorality, improper conduct, or excesses of the said A. B. "If seriously ill and incapacitated, you would be sent home."

The agreement was for four years, terminable on C. D. & Co.'s side by giving one calendar month's notice in writing. "If a second agreement should be entered into, in addition to a substantial increase in salary, the firm would give you six months' leave of absence, pay passage one way, and allow half-pay during the time you are away."

That is rather liberal, I thought, and the salary seemed very fair, though my reasons for leaving the Old Country were not so much pecuniary as sanitary. Of course, I had taken into account the vagaries of the rupee. In addition to salary, furnished quarters were to be found, bed-linen, towels, table necessaries—everything, in fact, except food and raiment. After a little more conversation, and references being given, I left to think the matter over at my leisure. Ultimately we agreed—he to accept my application, and I to go—and I have now been in India nearly a year.

The business, primarily started as a chemist's, now embraces the majority of ordinary English trades. We stock practically everything from cinematographs, theodolites and rifles to hams, jewellery and Beecham's pills. Hours of business, 9 A.M.—6 P.M., Saturday 2 P.M. No Sunday duty. One hour is allowed for tiffin, at midday. The dispensing is done by the native compounders, of whom we employ about twenty. Each bottle of medicine is brought to the English qualified chemist, the compounder repeats in a sing-song voice the ingredients and quantities he has put in, and the chemist initials his book, and also a form which is sent to the patient with his mixture.

There are ten qualified chemists on the staff, and six of us live in a bungalow and take it in turns to be mess-president—an unenviable position, especially for a new man. Each keeps a "boy," equivalent to an English valet, to wait at table, keep room and clothes tidy, and generally to make himself useful. For this he receives the princely remuneration of 12r. per mensem and what he can steal. There is an English assistant at the head of each department, for which he is responsible. The temperature at present is very pleasant—about 80° F. day after day—and picnics can be arranged a month in advance with every confidence as regards the weather. Living is fairly cheap, though rent is very high, clothes such as one wants (white trousers, Cawnpore shirt, socks and shoes being all that is necessary) not making a very big item in the expenditure account. Taken all round it is an improvement on London life, with its long hours, ceaseless hurry, and the discomfort of living in diggings.